OptiXtrans E6608
Quick Installation Guide

Issue 01

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Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: https://www.huawei.com

Email: support@huawei.com

Update History

Updates between document issues are cumulative. Therefore, the latest document issue contains all updates made in previous issues.

Issue	Change Description	Change Position
01	This issue is the first official release.	Added this document.

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Installation Precautions

NOTE

This document provides guidelines for quick hardware installation. It describes procedures for onsite installation, but does not describe pre-delivery assembly.

CAUTION

Safety Information

- Always wear protective gloves when lifting or transporting a cabinet to prevent hand injuries or damage to the cabinet surface.
- The equipment is heavy. To prevent human injuries or equipment damage, always use a lifting device to transport or position the equipment. Use a pallet truck or heavy-duty bogie wagon to transport the equipment on even ground, and use a cargo lift to transport the equipment between different floors. If the equipment room does not have a cargo lift, a stair-climbing truck is recommended to transport the equipment between different floors.

CAUTION

ESD Protection

Always wear ESD gloves or an ESD wrist strap prior to contact with the equipment or before handling devices, boards, or IC chips to prevent damage to sensitive components due to electrostatic discharge from the human body. Ensure that the ESD wrist strap is properly grounded.

CAUTION

Binding Cables

Binding intervals between cable ties or optical fiber binding straps inside the cabinet cannot exceed 250 mm. (Binding intervals cannot exceed 200 mm for user cables.)

Binding intervals between cable ties for all cables and corrugated pipes outside the cabinet are determined based on the distance between the two horizontal beams of the overhead cable tray. If the cable trough does not contain any beams, the binding intervals between cable ties cannot exceed 250 mm.

CAUTION

Checking Before Installation

Ensure that the equipment room, cabinets, power supplies, ground cables, optical cables, and associated devices are ready for installation. Start the installation according to the engineering design documents after confirming that all conditions are met.

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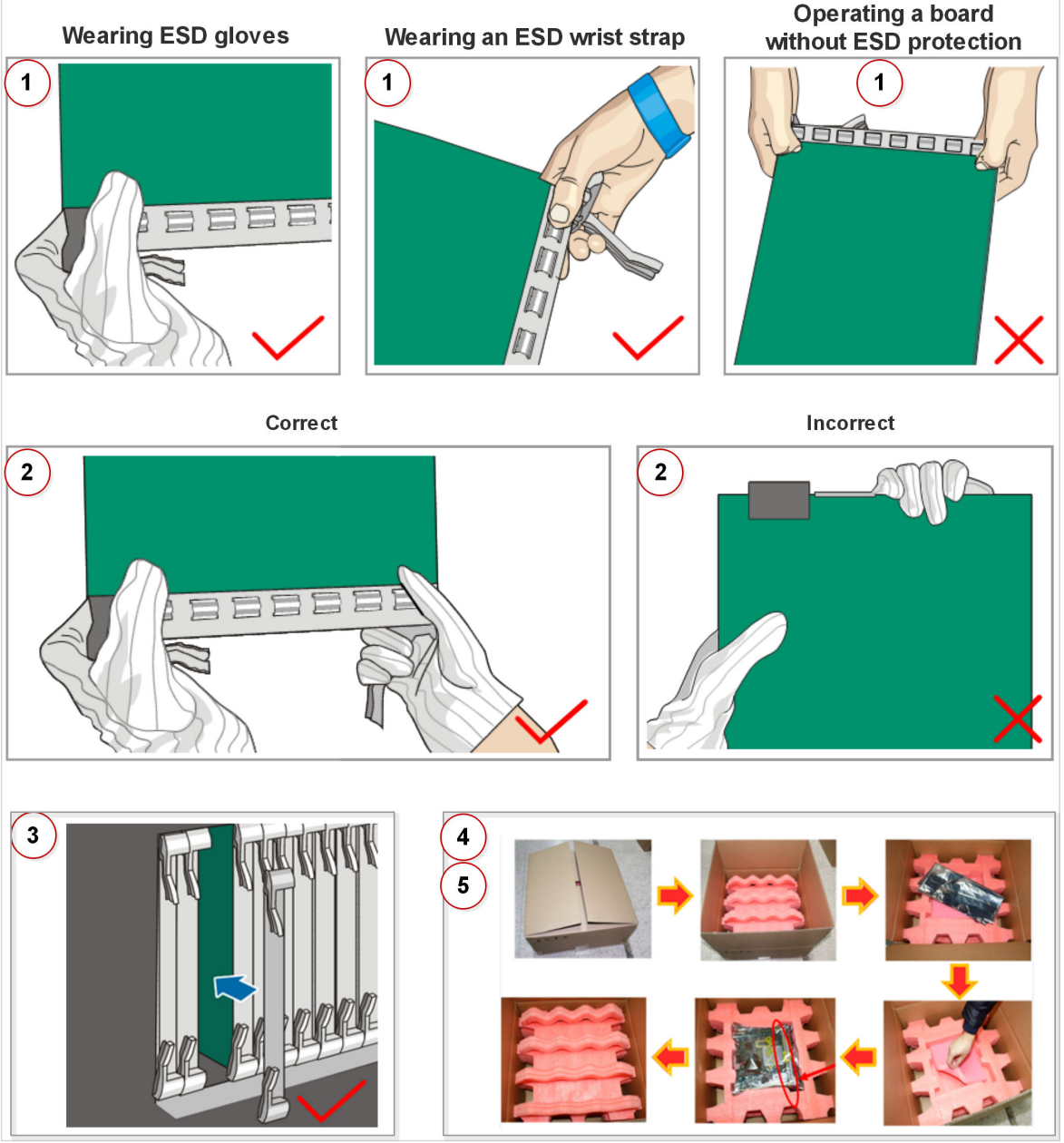
Requirements and Precautions for Operating Boards



Installation No.	Installation Personnel	Installation Time

Precautions	
1	It is forbidden to hold the board with bare hands, and you must wear or an ESD wrist strap or ESD gloves when operating the board.
2	The correct way to hold the board: hold the board with both hands, and hold both hands at the handle bar position, otherwise the board may fail.
3	Any vacant slot must be covered by a filler panel to prevent foreign objects from entering the subrack or system ventilation ducts. Foreign objects may cause an NE failure.
4	Boards are fragile and vulnerable. When transporting or placing a board, exercise caution and ensure that the board is packed in a dedicated box to protect the board against damage.
5	Boards must be packed with original packaging materials during transportation. If the original packaging materials are lost, contact Huawei.

Installation Tools					
1		2		3	
4		5		6	

Installation Materials							
1		2		3		4	
5		6		7		8	

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Installation Tools

Tools for Installing Cabinets

Vacuum cleaner	Hammer drill	Plumb line	Marker	Ø16 drill bit	Multimeter
Claw hammer	Combination wrench	Phillips screwdriver	Flat-head screwdriver	Powder marker	M6~M12 socket wrench
Ruler	Level	Torque wrench			

Equipment for Installing Cabinets

Measuring tape	Phillips screwdriver	Flat-head screwdriver	Adjustable wrench	Heat gun	Segmented blade utility knife
COAX crimping tool	Wire clippers	COAX stripper	RJ45 crimping tool	Diagonal pliers	Wire stripper
Power cable crimping tool	Network cable tester	Multimeter	Fiber extractor		

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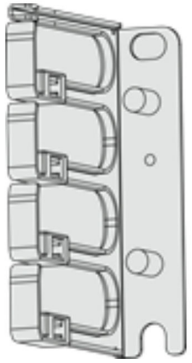
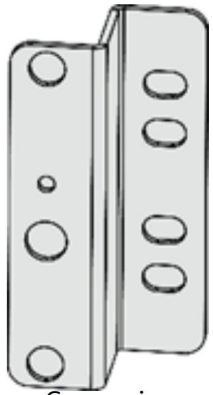
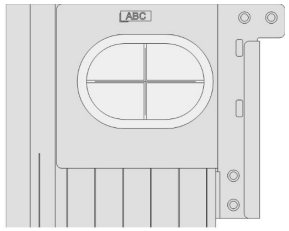
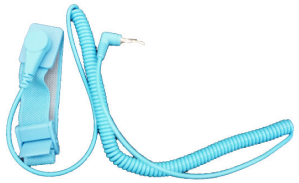
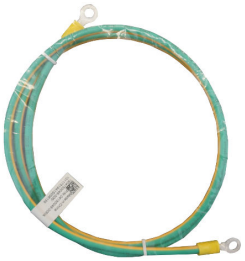
Installation Accessories

 Cable management frame	Mounting ear for the 19-inch cabinet	 Conversion mounting ear	 Air baffle of the chassis	 ESD wrist strap	DC power cable
OT terminal	Cord end terminal	Fiber binding strap	Cable tie	AC power cable	 PGND cable

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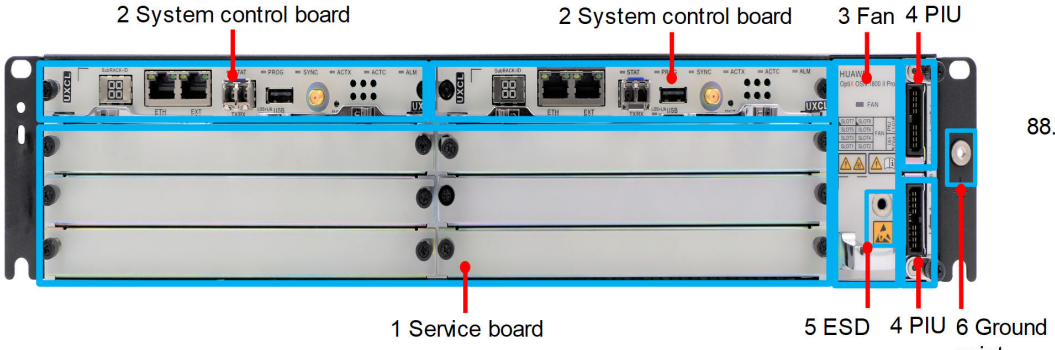
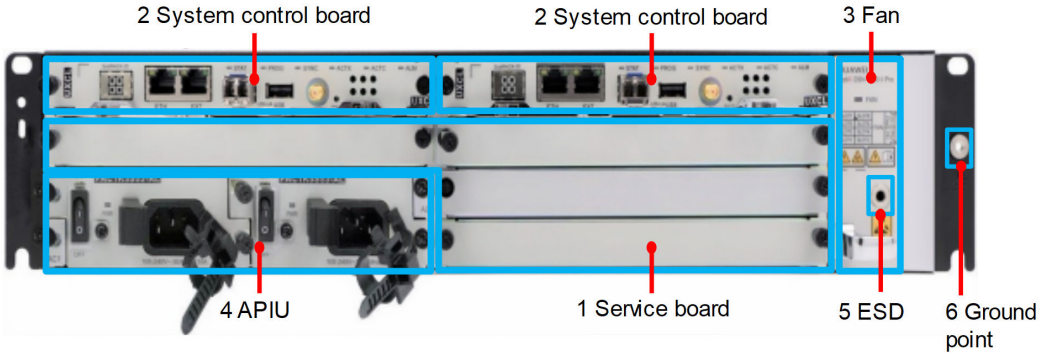
Introduction to the OptiXtrans E6608

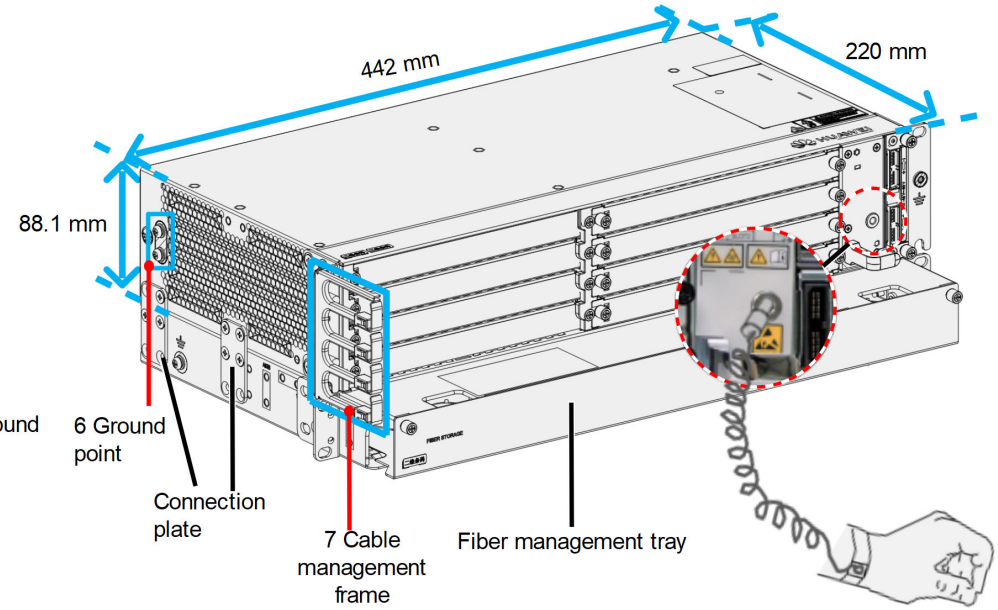
Product	Supported Since
E6608	V100R019C10



E6608 chassis (DC)



E6608 chassis (AC)



E6608 chassis with a fiber management tray

NOTE

The fiber management tray and cable supports are installed before delivery.

CAUTION

Always wear ESD gloves or an ESD wrist strap prior to contact with the equipment or before handling devices, boards, or IC chips to prevent damage to sensitive components due to electrostatic discharge from the human body. Ensure that the ESD wrist strap is properly grounded.

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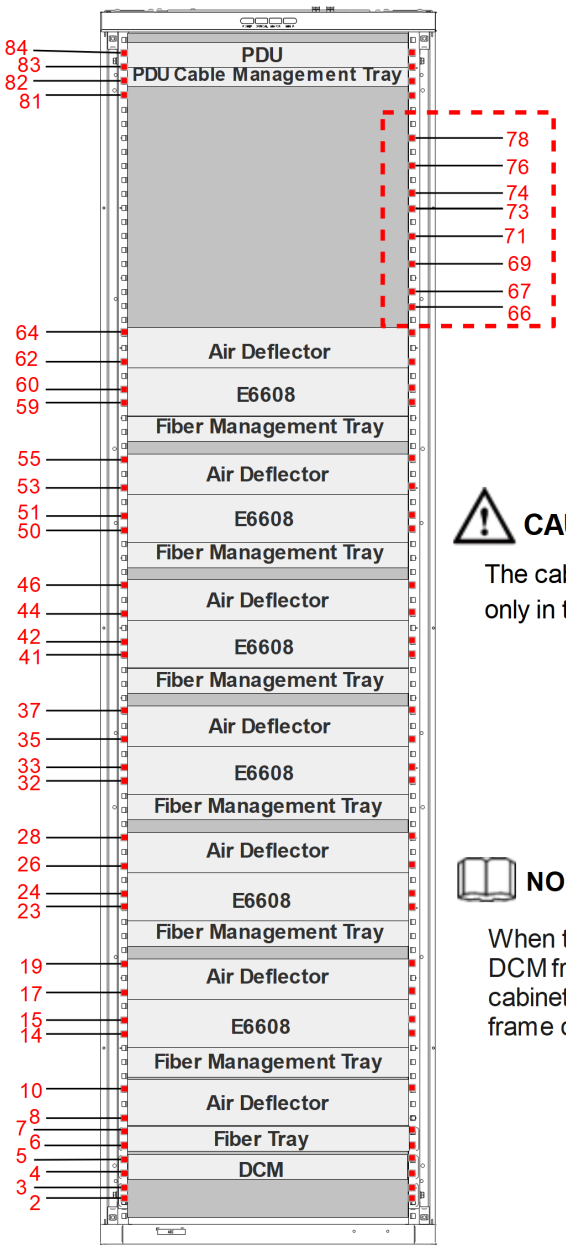
Introduction to Typical Configuration Scenario (A63B + 6 x E6608)



Mounting holes for the cabinet air baffle

CAUTION

The cabinet air baffle is installed only in the right side.

NOTE

When the cabinet is delivered as a whole, only one DCM frame is installed at the bottom of the cabinet. After the cabinet is secured, another DCM frame can be added as required.

Typical Configuration

DPD60-12-12B + 1 x PDU Cable Management Tray + 7 x Air Deflector + 6 x E6608 + 1 x Fiber Tray + 1 x DCM Frame

The chassis is configured from bottom to top.

Part	Mounting Hole
DPD60-12-12B	83, 84
PDU Cable Management Tray	81, 82
Air Deflector	62, 64 55, 53 44, 46 35, 37 26, 28 17, 19 8, 10
E6608 with an FMT	59, 60 50, 51 41, 42 32, 33 23, 24 14, 15
Fiber Tray	6, 7
DCM frame	4, 5 2, 3 (Reserved)

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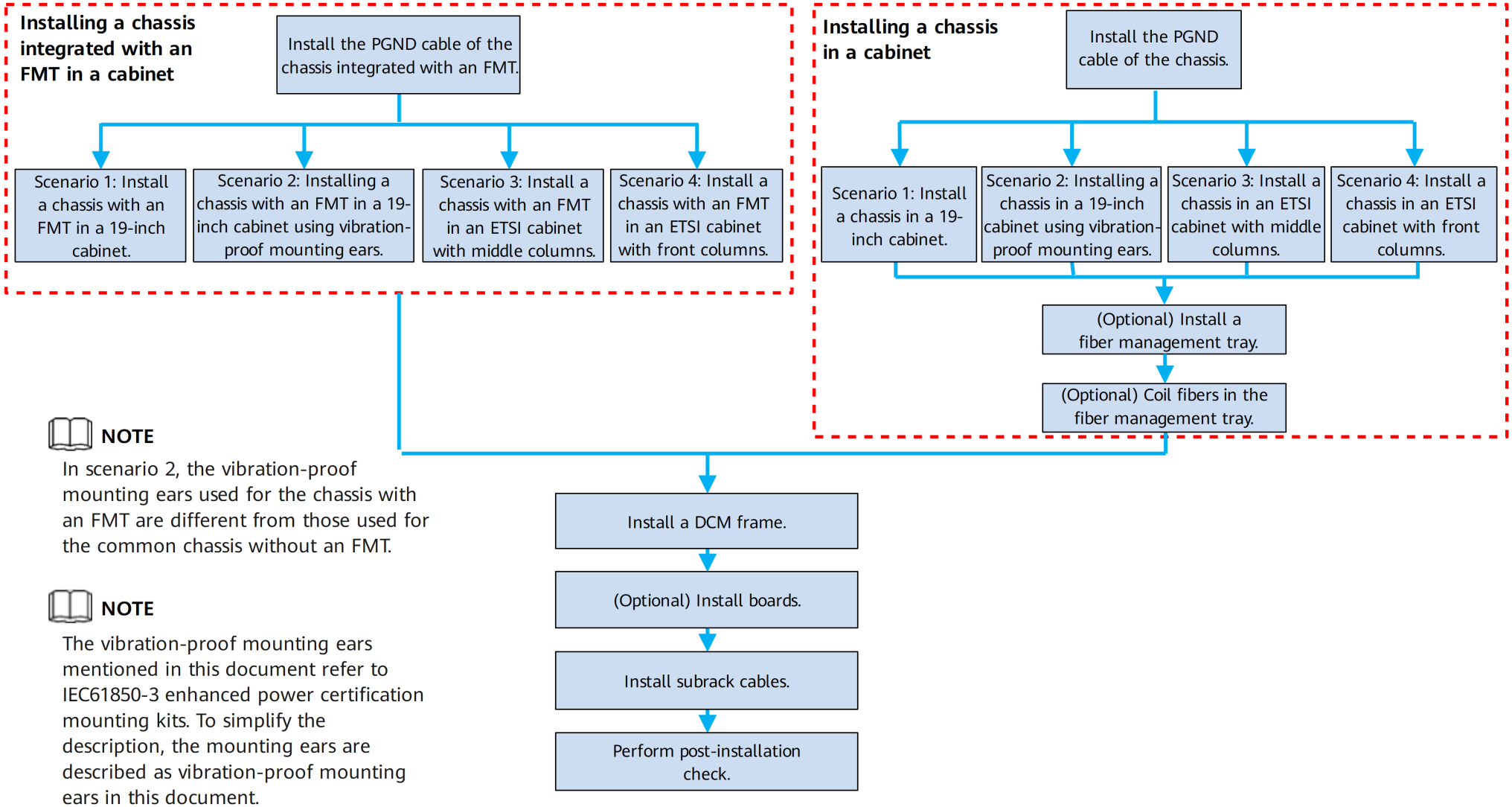
Installation Process



NOTE

In scenario 2, the vibration-proof mounting ears used for the chassis with an FMT are different from those used for the common chassis without an FMT.

NOTE

The vibration-proof mounting ears mentioned in this document refer to IEC61850-3 enhanced power certification mounting kits. To simplify the description, the mounting ears are described as vibration-proof mounting ears in this document.

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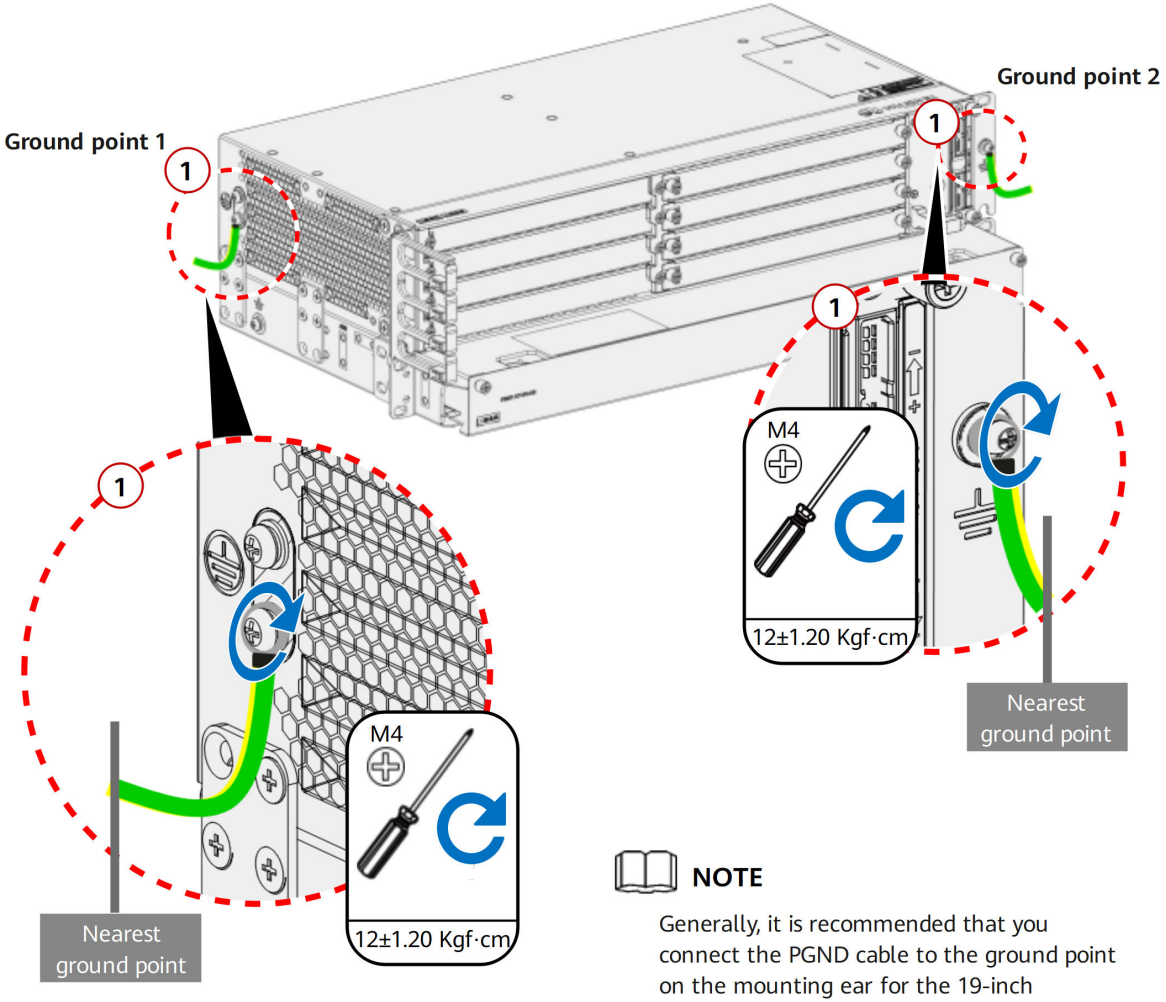
Installing the PGND Cable of the Chassis Integrated with an FMT



NOTE

Generally, it is recommended that you connect the PGND cable to the ground point on the mounting ear for the 19-inch cabinet. To facilitate cabling, you can also connect the PGND cable to the ground point on the left side of the chassis.

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Connect the one-hole OT terminal at one end of the cable to the ground point on the left or right mounting ear of the chassis, and connect the one-hole OT terminal at the other end of the cable to the nearest ground point.

Precautions	
1	Ensure that the ground point is clean and there is no paint or insulated object on it.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials					
1	PGND cable	2	Ground screw	3	
4		5		6	

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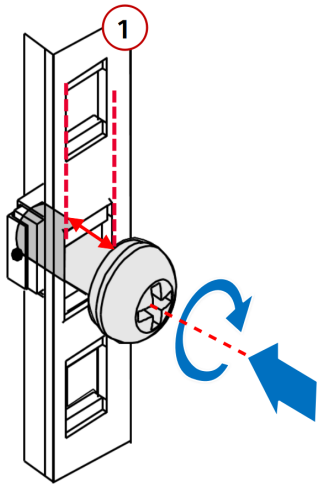
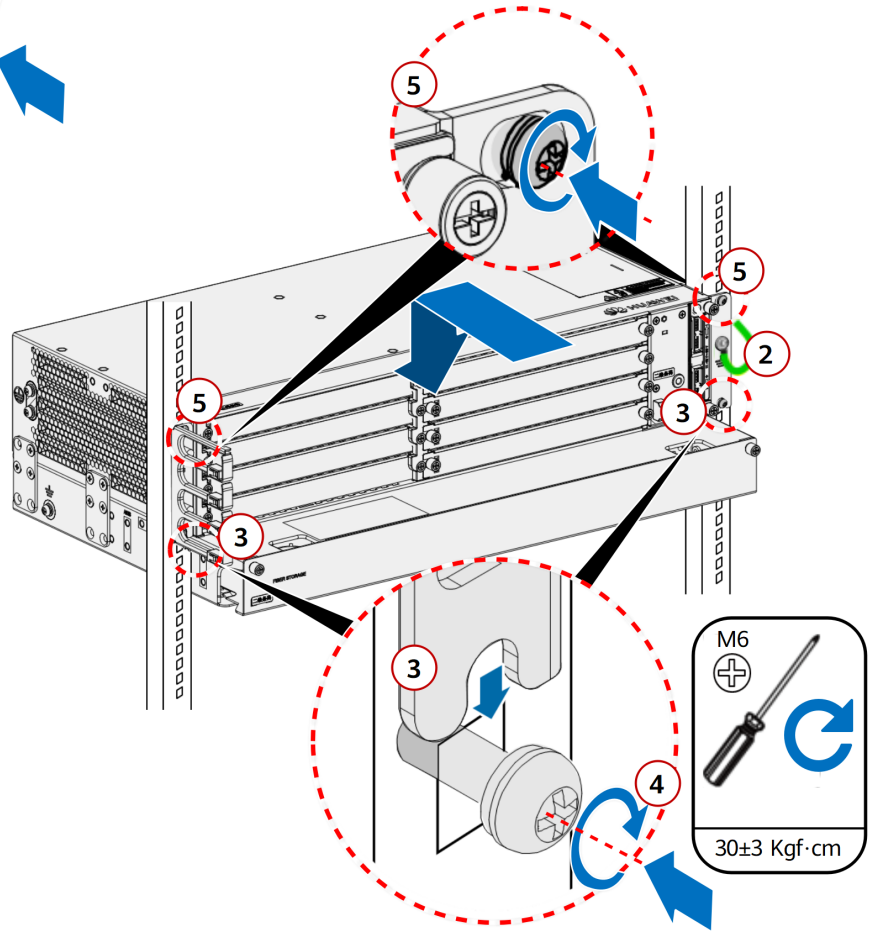
Scenario 1: Installing a Chassis with an FMT in a 19-inch Cabinet



NOTE

When installing M6 screws, install the screws at the bottom of the integrated chassis first. For the screws at the top, insert the integrated chassis into the cabinet and then install them.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Install M6 screws on the floating nuts on the mounting bars on both sides of the 19-inch cabinet. Reserve a gap of proper thickness between the screws and the mounting bars.
2	Install the PGND cable at the ground point on the right side of the chassis. For details, see "Installing the PGND Cable of the Chassis Integrated with an FMT" .
3	Install the integrated chassis into the cabinet. Ensure that the holes under the mounting ears are tightly inserted into the reserved space for M6 screws.
4	Tighten the M6 screws.
5	Use M6 screws to secure the integrated chassis to the cabinet through the holes on the top of the mounting ears.

Precautions	
1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.
2	When installing the chassis, protect the optical fibers installed in the chassis. Do not pull or squeeze the optical fibers.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	Panel screw	2	Ground screw	3		HUAWEI
4		5		6		

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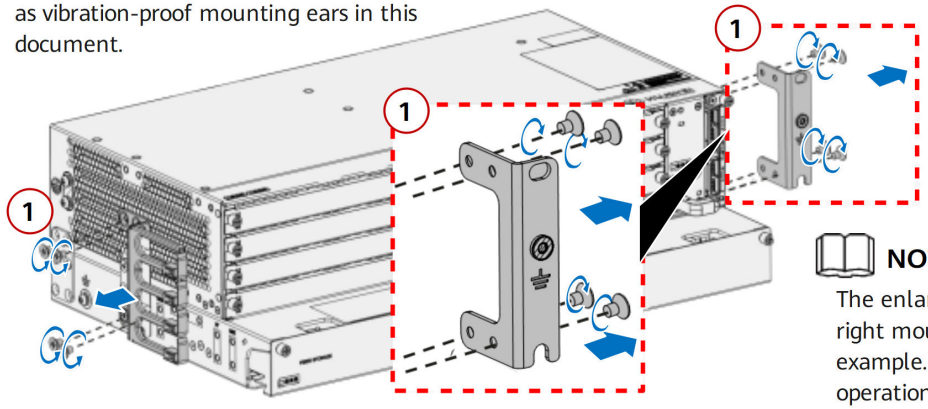
Scenario 2: Installing a chassis with an FMT in a 19-inch Cabinet Using Vibration-Proof Mounting Ears

NOTE

The vibration-proof mounting ears mentioned in this document refer to IEC61850-3 enhanced power certification mounting kits. To simplify the description, the mounting ears are described as vibration-proof mounting ears in this document.

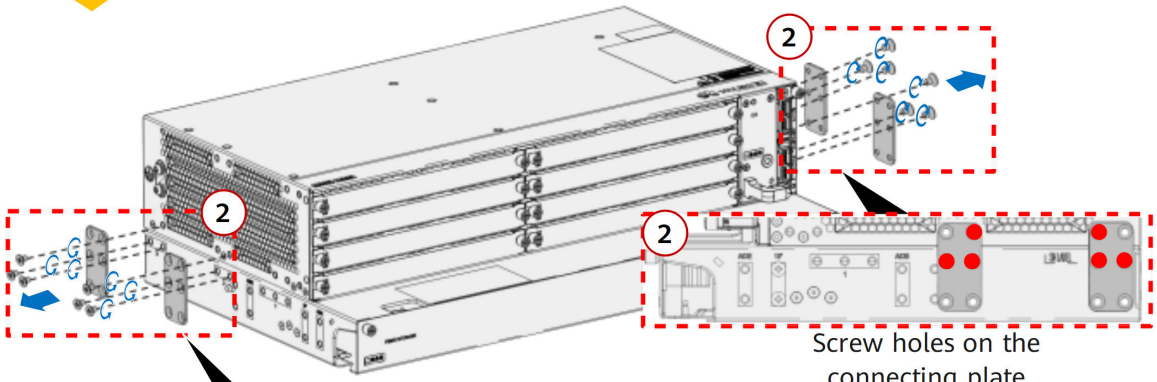
CAUTION

Before installing vibration-proof mounting ears, remove the mounting ears and connection plates from both sides.

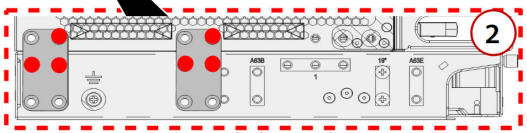


NOTE

The enlarged figure uses the right mounting ear as an example. Perform the same operations on the left mounting ear.



Screw holes on the connecting plate
(Right view of the chassis)



Screw holes on the connecting plate
(Left view of the chassis)

NOTE

You are advised to remove the connecting plate on one side first, and then remove the connecting plate on the other side after installing the vibration-proof mounting ears.

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Remove the mounting ears on both sides of the chassis. Loosen the bolts on the left and right mounting ears of the chassis anticlockwise, and then remove the left and right mounting ears of the chassis. Dispose of the removed mounting ears. Reserve the cable manager frame for future use.
2	Remove the connecting plates. Loosen the screws that secure the connecting plate counterclockwise and remove the connecting plate.
3	Use M4 screws to install the vibration-proof mounting ears on the left and right of the chassis.
4	Use M3 screws to install the cable manager frame on the left mounting ear of the chassis.

Precautions	
1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.
2	The subrack enhancement parts are delivered separately and are not included in the default delivery list of the chassis.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	vibration-proof mounting ears	2	M4 screw	3	M3 screw	HUAWEI
5		6		7		

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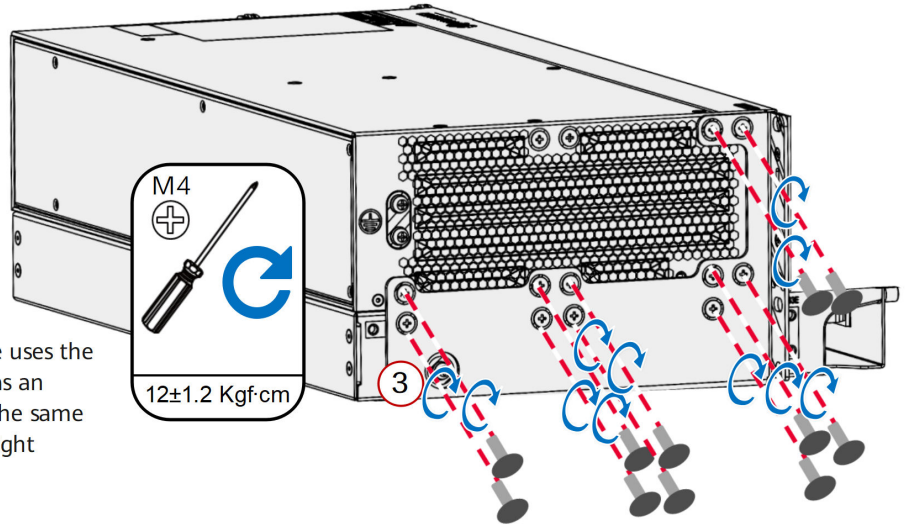
Scenario 2: Installing a chassis with an FMT in a 19-inch Cabinet Using Vibration-Proof Mounting Ears (Continued)

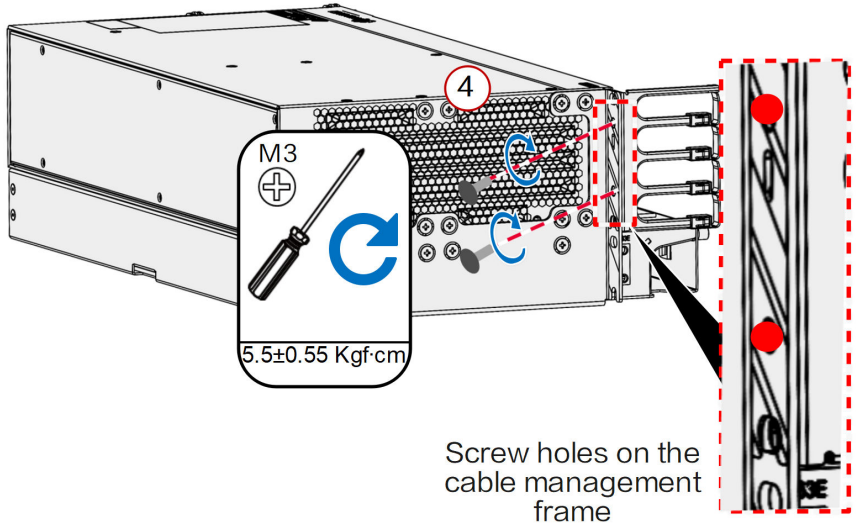
NOTE

The vibration-proof mounting ears mentioned in this document refer to IEC61850-3 enhanced power certification mounting kits. To simplify the description, the mounting ears are described as vibration-proof mounting ears in this document.



NOTE

The enlarged figure uses the left mounting ear as an example. Perform the same operations on the right mounting ear.



Installation No.	Installation Personnel	Installation Time

Installation Procedure

1	Remove the mounting ears on both sides of the chassis. Loosen the bolts on the left and right mounting ears of the chassis anticlockwise, and then remove the left and right mounting ears of the chassis. Dispose of the removed mounting ears. Reserve the cable manager frame for future use.
2	Remove the connecting plates. Loosen the screws that secure the connecting plate counterclockwise and remove the connecting plate.
3	Use M4 screws to install the vibration-proof mounting ears on the left and right of the chassis.
4	Use M3 screws to install the cable manager frame on the left mounting ear of the chassis.

Precautions

1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.
2	The subrack enhancement parts are delivered separately and are not included in the default delivery list of the chassis.

Installation Tools

1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials

1	Vibration-proof mounting ears	2	M4 screw	3	M3 screw	HUAWEI
5		6		7		

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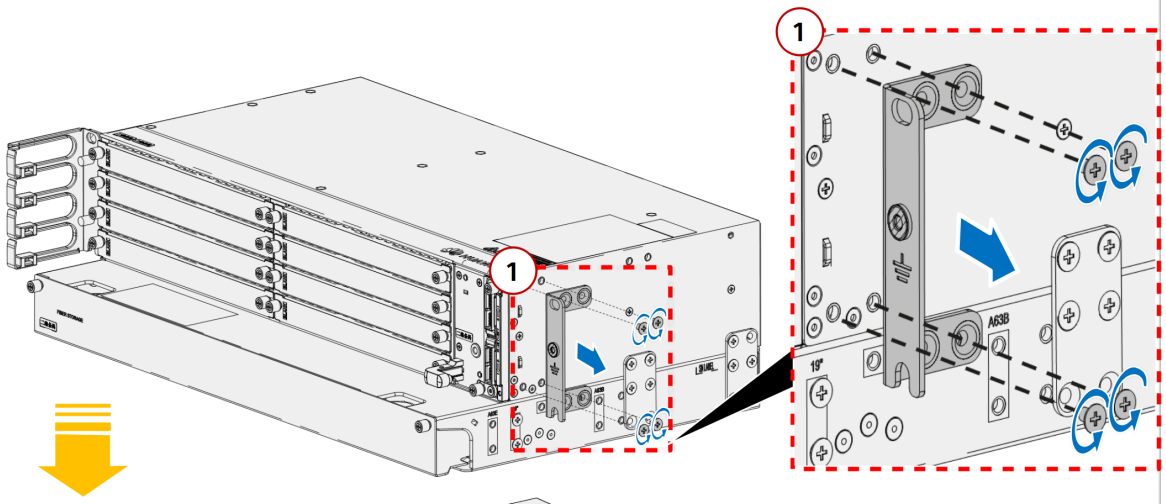
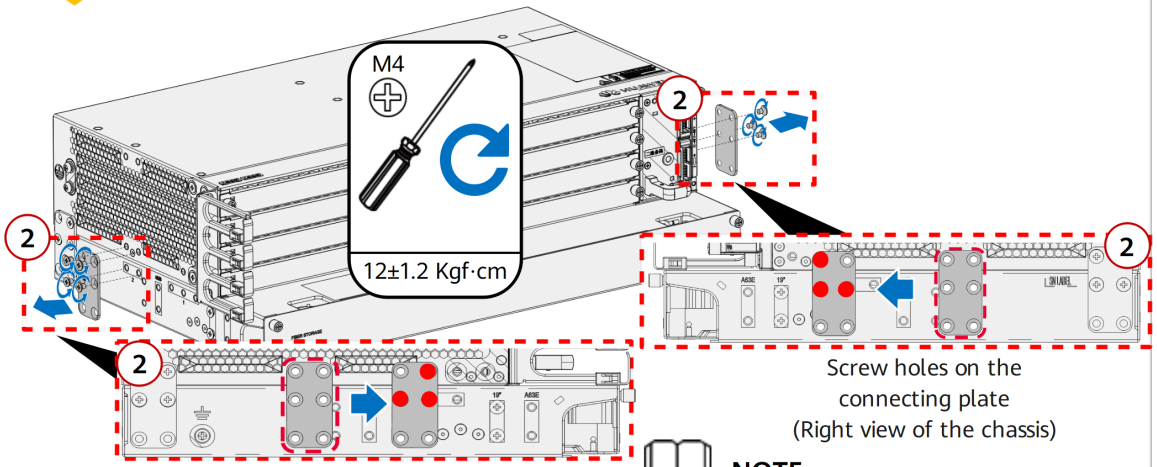
Scenario 3: Installing a Chassis with an FMT in an ETSI Cabinet with Middle Columns

NOTE

When the chassis with an FMT is installed in an ETSI cabinet with a middle column (such as an A63B cabinet):

- Use the conversion mounting ears and the default mounting ears of the 19-inch cabinet to assemble the mounting ears of the ETSI cabinet.
- Change the position of the connecting plate in the middle to avoid interference with the mounting ears of the ETSI cabinet.





Screw holes on the connecting plate (Left view of the chassis)

Screw holes on the connecting plate (Right view of the chassis)

NOTE

You are advised to replace the middle connecting plate on one side first and then on the other side.

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Remove the right mounting ear for the 19-inch cabinet. Loosen and remove the bolts on the mounting ear for the 19-inch cabinet on the right side of the chassis counterclockwise. Keep the mounting ear for future use.
2	Use M6 bolts to secure the 19-inch mounting ears of the chassis to the conversion mounting ears. Assemble the mounting ears of the ETSI cabinet and secure them to both sides of the integrated chassis.
3	Assemble mounting ears for the ETSI cabinet. Use M6 bolts to assemble the mounting ears for the 19-inch cabinet and conversion mounting ears together to form the mounting ears for the ETSI cabinet, and then secure the mounting ears to both sides of the integrated chassis.
4	Install the air baffle on the right side of the integrated chassis.
5	Install the PGND cable at the ground point on the left side of the chassis. For details, see "Installing the PGND Cable of the Chassis Integrated with an FMT".
6	Use M6 screws to fix the integrated chassis to the columns of the cabinet through the holes in the mounting ears.
7	Connect the other end of the PGND cable to the nearest ground point of the cabinet.

Precautions	
1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	Conversion mounting ear	2	Mounting ears for the 19-inch cabinet	3		HUAWEI
4		5		6		

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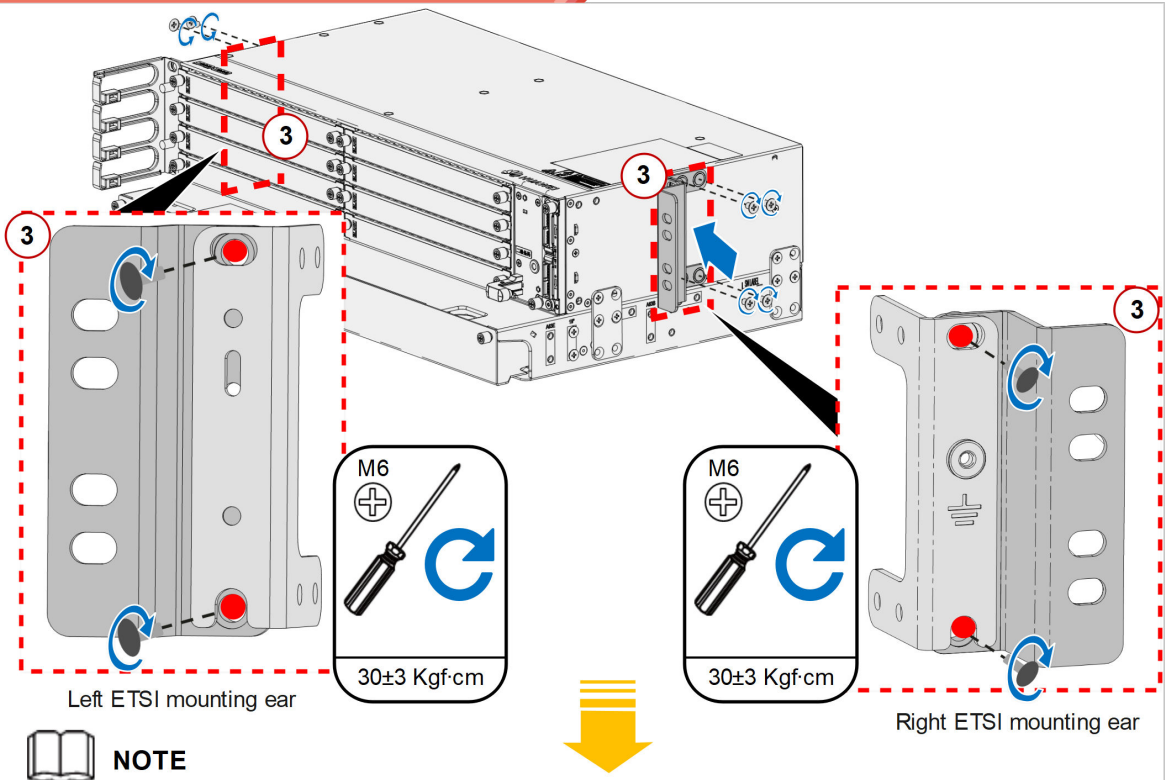
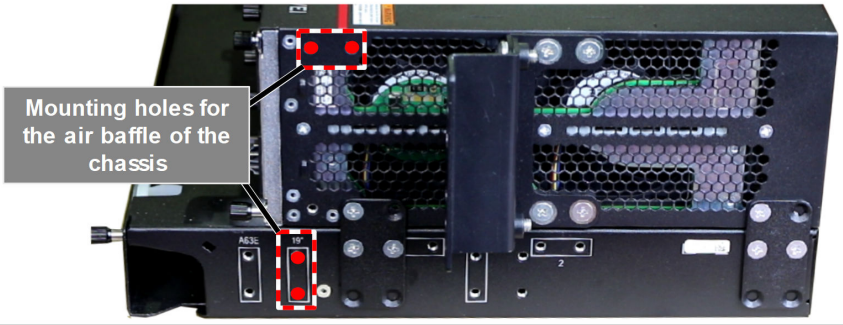
Scenario 3: Installing a Chassis with an FMT in an ETSI Cabinet with Middle Columns (Continued)



NOTE

- When the A63B cabinet is fully configured with six E6608 chassis (standard configuration), the air baffles of the six chassis are preinstalled on the chassis.
- If the A63B cabinet is not fully configured with six E6608 chassis, for example, five E6608 chassis, the five air baffles are installed on the chassis in advance, and the other one is bound in the cabinet for delivery, installed on the chassis during capacity expansion.



Installation No.	Installation Personnel	Installation Time

Installation Procedure

1	Remove the right mounting ear for the 19-inch cabinet. Loosen and remove the bolts on the mounting ear for the 19-inch cabinet on the right side of the chassis counterclockwise. Keep the mounting ear for future use.
2	Use M6 bolts to secure the 19-inch mounting ears of the chassis to the conversion mounting ears. Assemble the mounting ears of the ETSI cabinet and secure them to both sides of the integrated chassis.
3	Assemble mounting ears for the ETSI cabinet. Use M6 bolts to assemble the mounting ears for the 19-inch cabinet and conversion mounting ears together to form the mounting ears for the ETSI cabinet, and then secure the mounting ears to both sides of the integrated chassis.
4	Install the air baffle on the right side of the integrated chassis.
5	Install the PGND cable at the ground point on the left side of the chassis. For details, see "Installing the PGND Cable of the Chassis Integrated with an FMT".
6	Use M6 screws to fix the integrated chassis to the columns of the cabinet through the holes in the mounting ears.
7	Connect the other end of the PGND cable to the nearest ground point of the cabinet.

Precautions

1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.

Installation Tools

1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials

1	Conversion mounting ear	2	Mounting ears for the 19-inch cabinet	3	
4		5		6	

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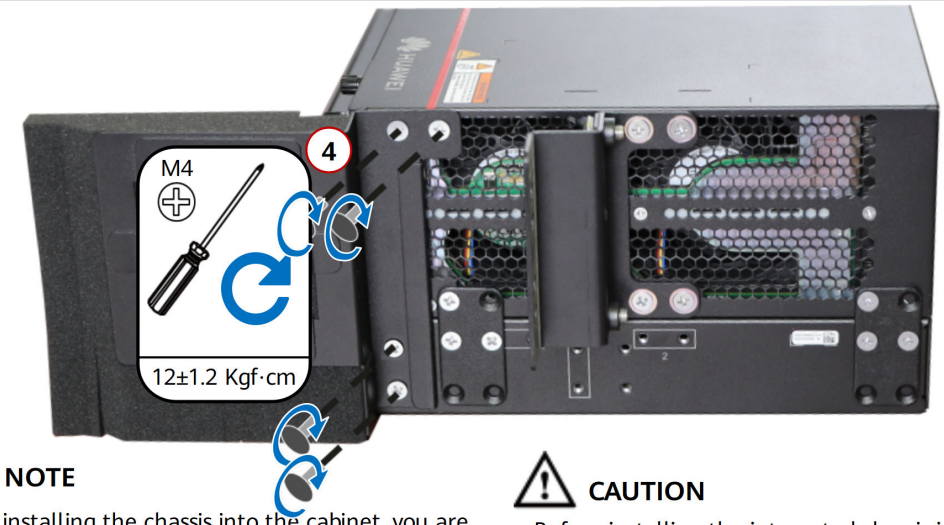
Scenario 3: Installing a Chassis with an FMT in an ETSI Cabinet with Middle Columns (Continued)

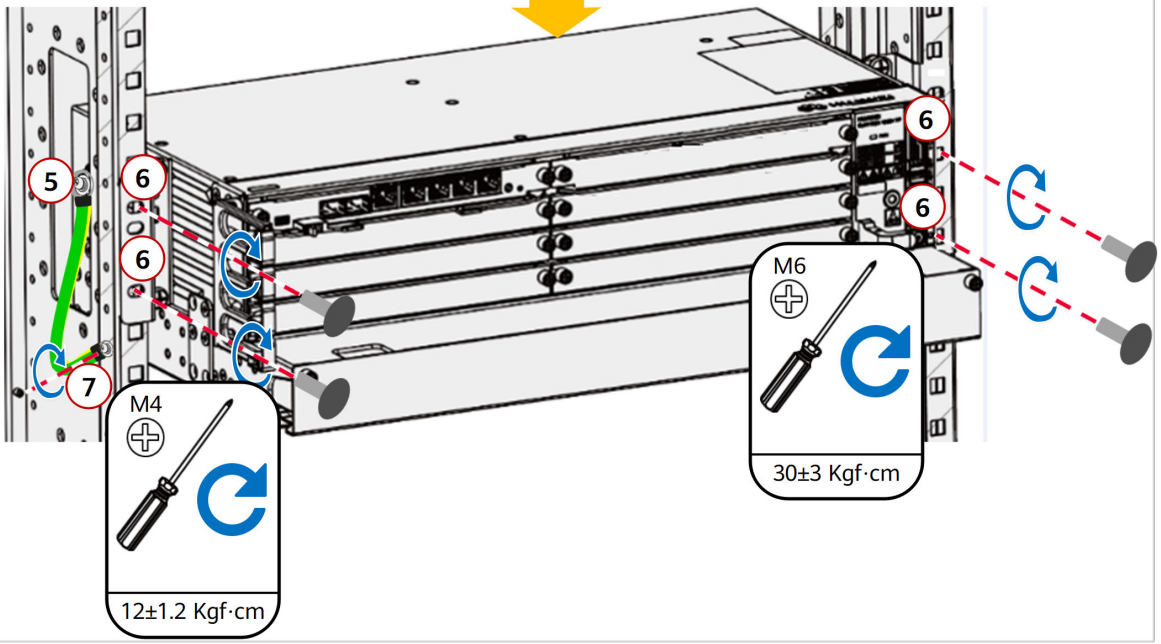


NOTE

Before installing the chassis into the cabinet, you are advised to install a PGND cable for the ground point on the chassis. For details, see "Installing a PGND Cable for the Chassis."

CAUTION

Before installing the integrated chassis in the standard A63B cabinet, remove the air baffle on the right of the cabinet.



Installation No.	Installation Personnel	Installation Time

Installation Procedure

1	Remove the right mounting ear for the 19-inch cabinet. Loosen and remove the bolts on the mounting ear for the 19-inch cabinet on the right side of the chassis counterclockwise. Keep the mounting ear for future use.
2	Use M6 bolts to secure the 19-inch mounting ears of the chassis to the conversion mounting ears. Assemble the mounting ears of the ETSI cabinet and secure them to both sides of the integrated chassis.
3	Assemble mounting ears for the ETSI cabinet. Use M6 bolts to assemble the mounting ears for the 19-inch cabinet and conversion mounting ears together to form the mounting ears for the ETSI cabinet, and then secure the mounting ears to both sides of the integrated chassis.
4	Install the air baffle on the right side of the integrated chassis.
5	Install the PGND cable at the ground point on the left side of the chassis. For details, see "Installing the PGND Cable of the Chassis Integrated with an FMT".
6	Use M6 screws to fix the integrated chassis to the columns of the cabinet through the holes in the mounting ears.
7	Connect the other end of the PGND cable to the nearest ground point of the cabinet.

Precautions

1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.

Installation Tools

1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials

1	Chassis air baffle	2	Panel screw	3	Ground screw
4		5		6	

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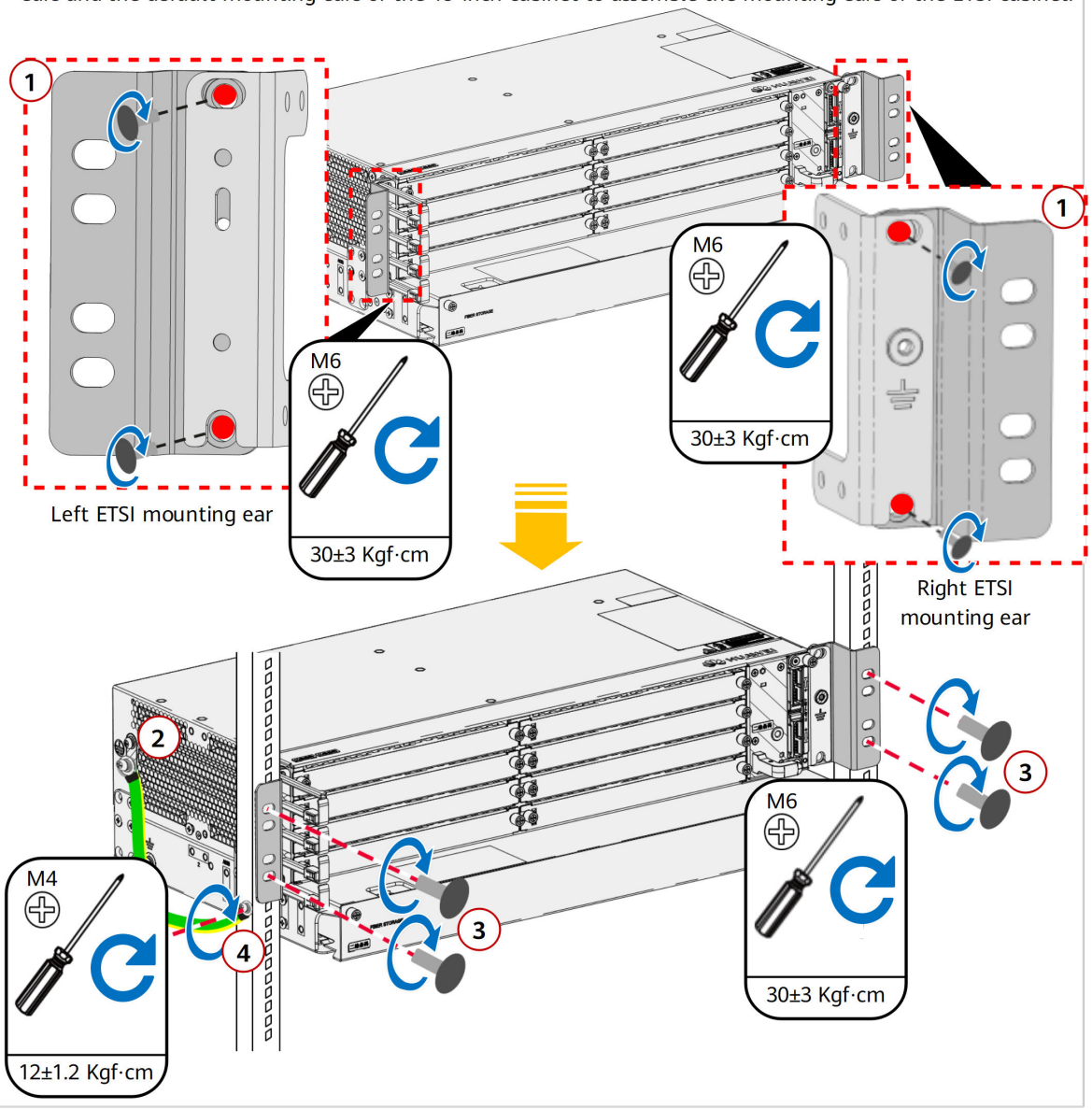
Scenario 4: Installing a Chassis with an FMT in an ETSI Cabinet with Front Columns

NOTE

When installing the integrated chassis in the ETSI cabinet with front columns, use the conversion mounting ears and the default mounting ears of the 19-inch cabinet to assemble the mounting ears of the ETSI cabinet.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Assemble mounting ears for the ETSI cabinet. Use M6 bolts to assemble the mounting ears for the 19-inch cabinet and conversion mounting ears together to form the mounting ears for the ETSI cabinet, and then secure the mounting ears to both sides of the integrated chassis.
2	Install the PGND cable at the ground point on the left side of the chassis. For details, see "Installing the PGND Cable of the Chassis Integrated with an FMT".
3	Install the chassis integrated with an FMT in the ETSI cabinet and secure the chassis using M6 panel screws.
4	Connect the other end of the PGND cable to the nearest ground point of the cabinet.

Precautions	
1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	Conversion mounting ear	2	Mounting ears for the 19-inch cabinet	3	Panel screw	HUAWEI
4	Ground screw	5		6		

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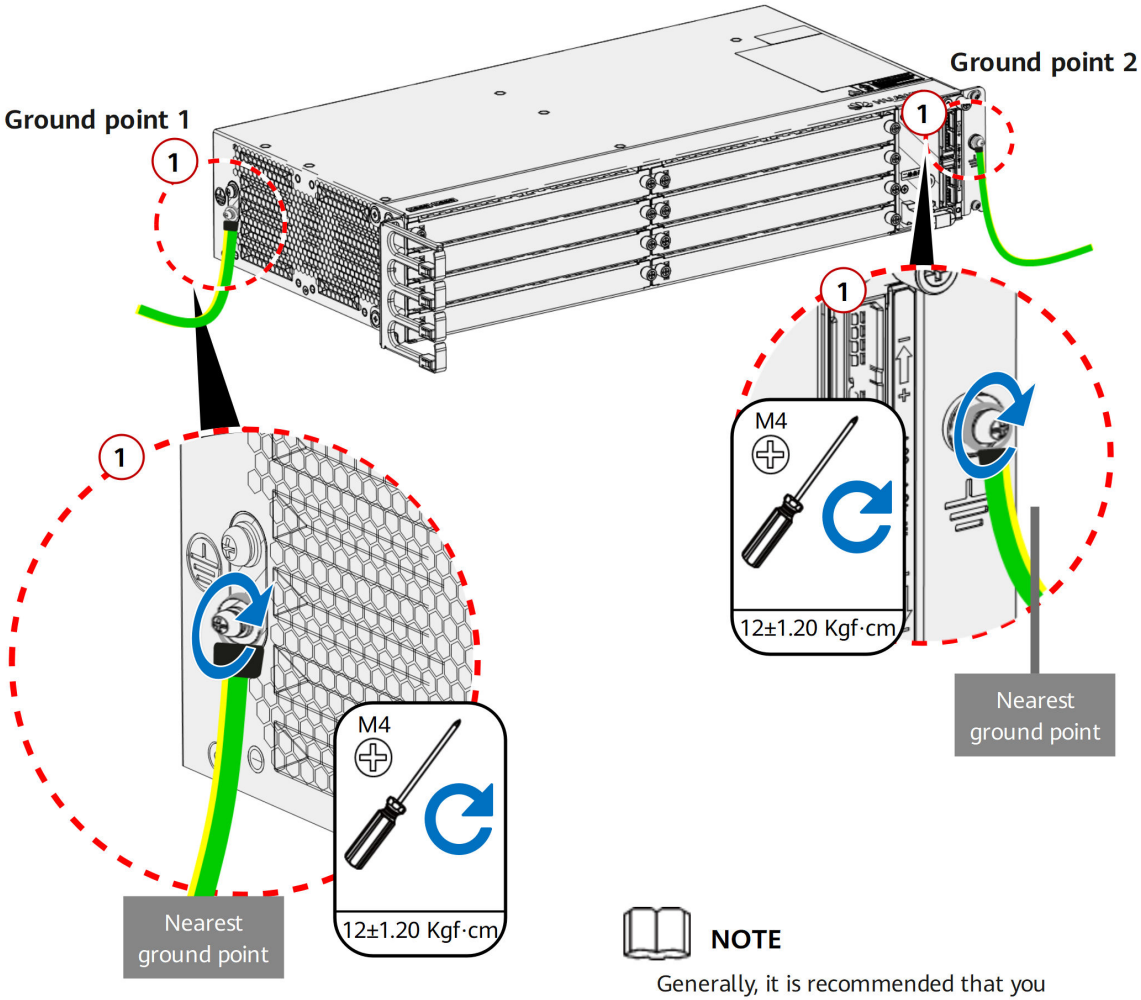
Installing the PGND Cable of the Chassis



NOTE

Generally, it is recommended that you connect the PGND cable to the ground point on the mounting ear for the 19-inch cabinet. To facilitate cabling, you can also connect the PGND cable to the ground point on the left side of the chassis.

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Connect the one-hole OT terminal at one end of the cable to the ground point on the left or right mounting ear of the chassis, and connect the one-hole OT terminal at the other end of the cable to the nearest ground point.

Precautions	
1	Ensure that the ground point is not covered with paint or other insulating objects.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials					
1	PGND cable	2		3	
4		5		6	

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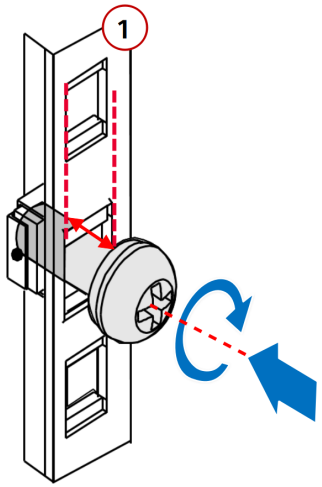
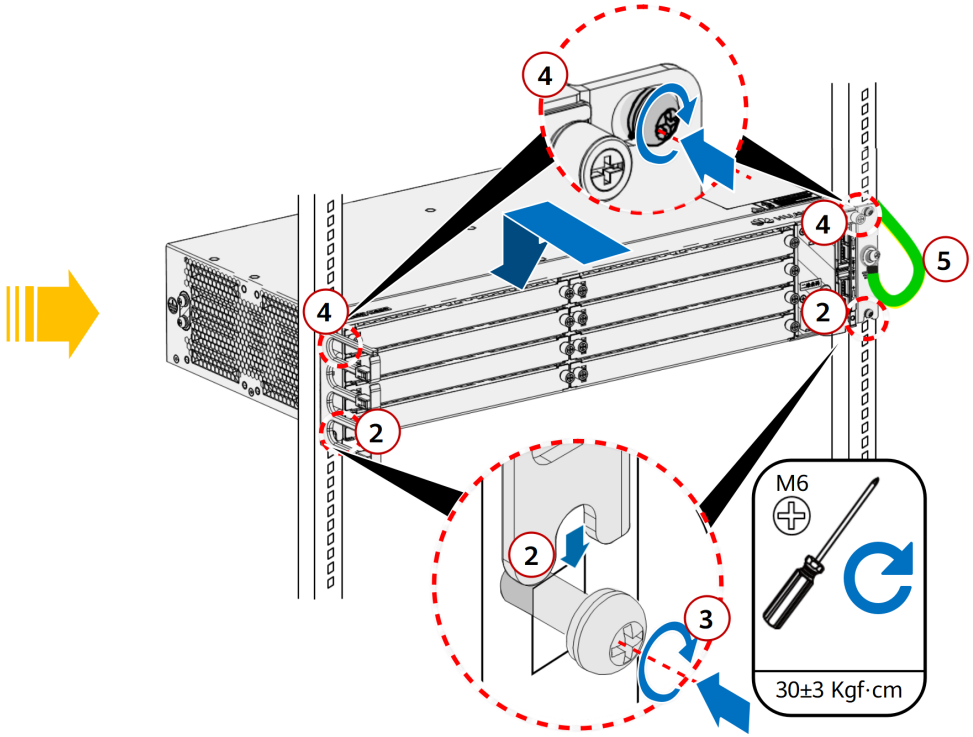
Scenario 1: Installing a Chassis in a 19-inch Cabinet



NOTE

When installing M6 screws, install the screws at the bottom of the chassis first. For the screws at the top, insert the chassis into the cabinet and then install them.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Install M6 screws on the floating nuts on the mounting bars on both sides of the 19-inch cabinet. Reserve a gap of proper thickness between the screws and the mounting bars.
2	Install the chassis into the cabinet. Ensure that the holes under the mounting ears are tightly inserted into the reserved space for M6 screws.
3	Tighten the M6 screws.
4	Use M6 screws to secure the chassis to the cabinet through the holes on the top of the mounting ears.
5	Install the PGND cable at the ground point on the right side of the chassis. For details, see "Installing the PGND Cable of the Chassis" .

Precautions	
1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.
2	When installing the chassis, protect the optical fibers installed in the chassis. Do not pull or squeeze the optical fibers.
3	Ensure that the installation space is sufficient before installing the chassis. If the installation space is insufficient, remove the fibers that are attached on the top of the chassis before installing the chassis.
4	The chassis should be installed from the bottom layer to the top layer. Determine the mounting holes before installing the chassis in the cabinet. Then install the floating nuts in the mapping mounting holes on the cabinet.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	Panel screw	2	Ground screw	3		HUAWEI
4		5		6		

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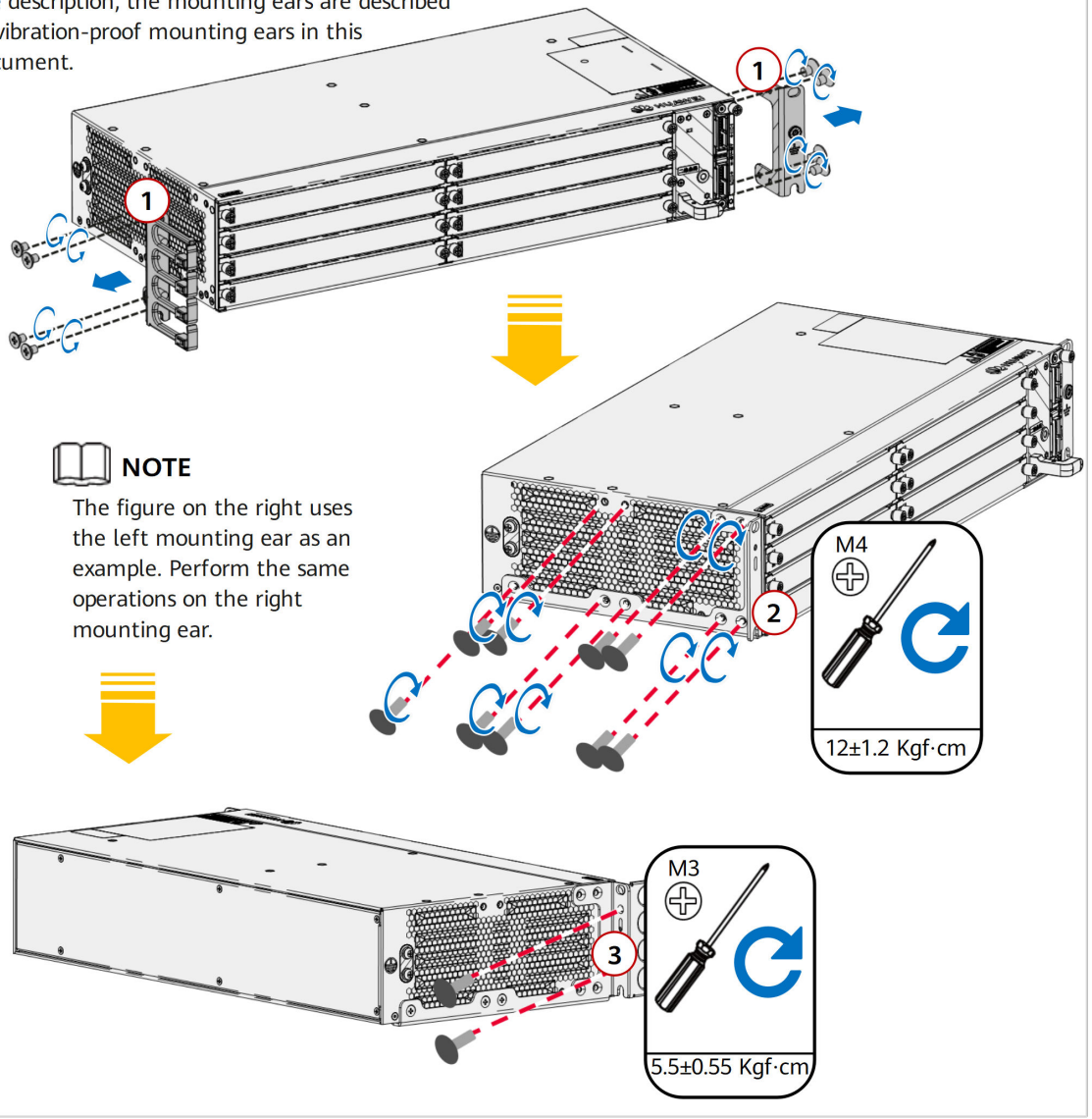
Scenario 2: Installing a Chassis in a 19-inch Cabinet Using Vibration-Proof Mounting Ears

NOTE

The vibration-proof mounting ears mentioned in this document refer to IEC61850-3 enhanced power certification mounting kits. To simplify the description, the mounting ears are described as vibration-proof mounting ears in this document.

CAUTION

Before installing vibration-proof mounting ears, remove the mounting ears from both sides.



NOTE

The figure on the right uses the left mounting ear as an example. Perform the same operations on the right mounting ear.

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Remove the mounting ears on both sides of the chassis. Loosen the bolts on the left and right mounting ears of the chassis anticlockwise, and then remove the left and right mounting ears of the chassis. Dispose of the removed mounting ears. Reserve the cable manager frame for future use.
2	Use M4 screws to install the vibration-proof mounting ears on the left and right of the chassis.
3	Use M3 screws to install the cable manager frame on the left mounting ear of the chassis.

Precautions	
1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.
2	The subrack enhancement parts are delivered separately and are not included in the default delivery list of the chassis.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	Vibration-proof mounting ears	2		3		HUAWEI
5		6		7		

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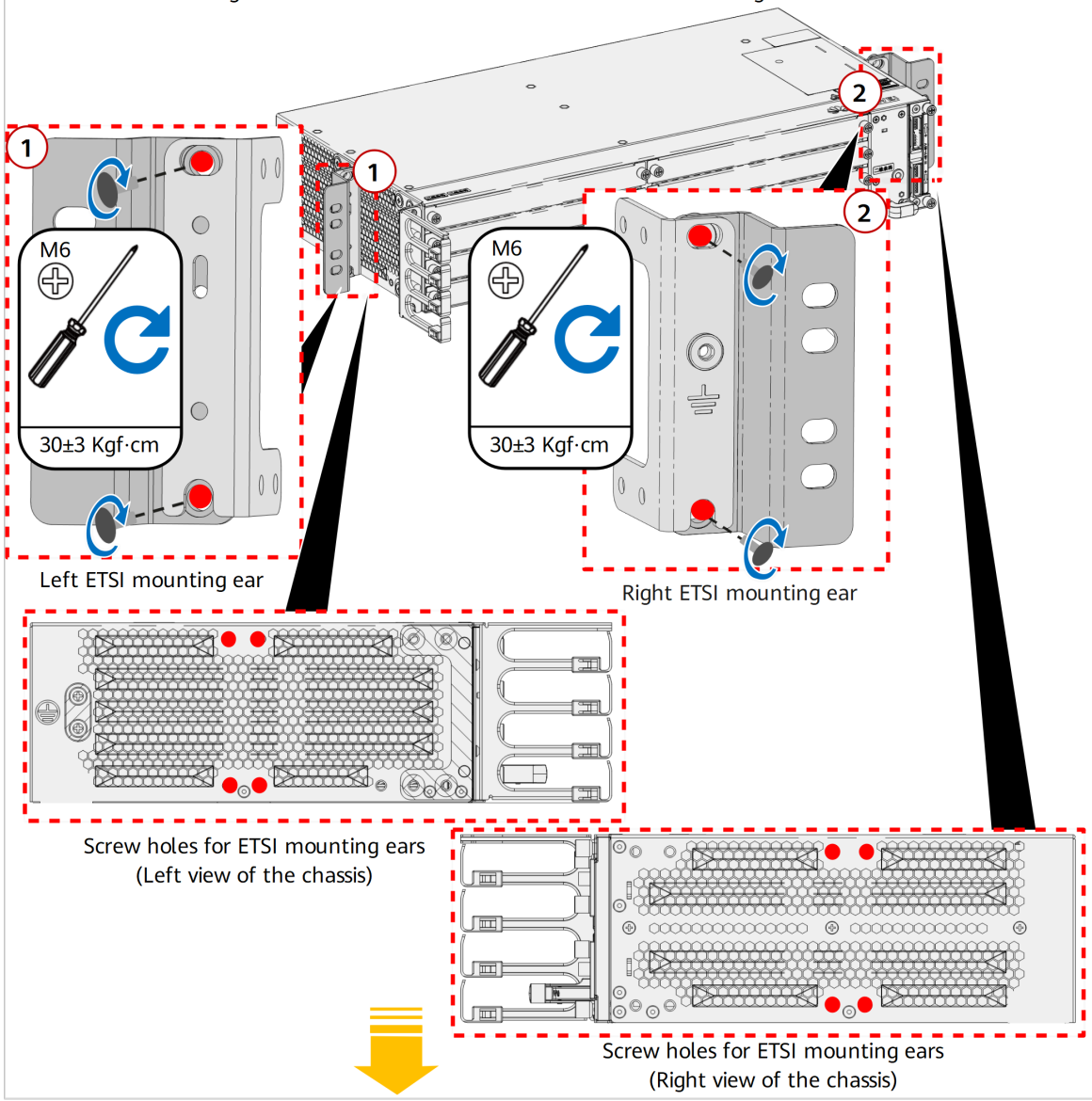
Scenario 3: Installing a Chassis in an ETSI Cabinet with Middle Columns

NOTE

When the chassis is installed in an ETSI cabinet with a middle column, use the conversion mounting ears and the default mounting ears of the 19-inch cabinet to assemble the mounting ears of the ETSI cabinet.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Assemble the left mounting ears for the ETSI cabinet. Assemble the conversion mounting ears and the new 19-inch mounting ears on the left side into the mounting ears of the ETSI cabinet by using fixing bolts, and then install the mounting ears on the middle left side of the chassis.
2	Remove the original 19-inch mounting ears on the right side of the cabinet, use bolts to assemble the conversion mounting ears and the removed right mounting ears into the mounting ears of the ETSI cabinet, and then install the mounting ears on the middle right side of the chassis.
3	Install the PGND cable at the ground point on the left side of the chassis. For details, see "Installing the PGND Cable of the Chassis".
4	Install the chassis in the ETSI cabinet and secure the chassis using M6 panel screws.
5	Connect the other end of the PGND cable to the nearest ground point of the cabinet.

Precautions	
1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.
2	When installing the chassis, protect the optical fibers installed in the chassis. Do not pull or squeeze the optical fibers.
3	Ensure that the installation space is sufficient before installing the chassis. If the installation space is insufficient, remove the fibers that are attached on the top of the chassis before installing the chassis.
4	The chassis should be installed from the bottom layer to the top layer. Determine the mounting holes before installing the chassis in the cabinet. Then install the floating nuts in the mapping mounting holes on the cabinet.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	Conversion mounting ear	2	Mounting ears for the 19-inch cabinet	3		HUAWEI
4		5		6		

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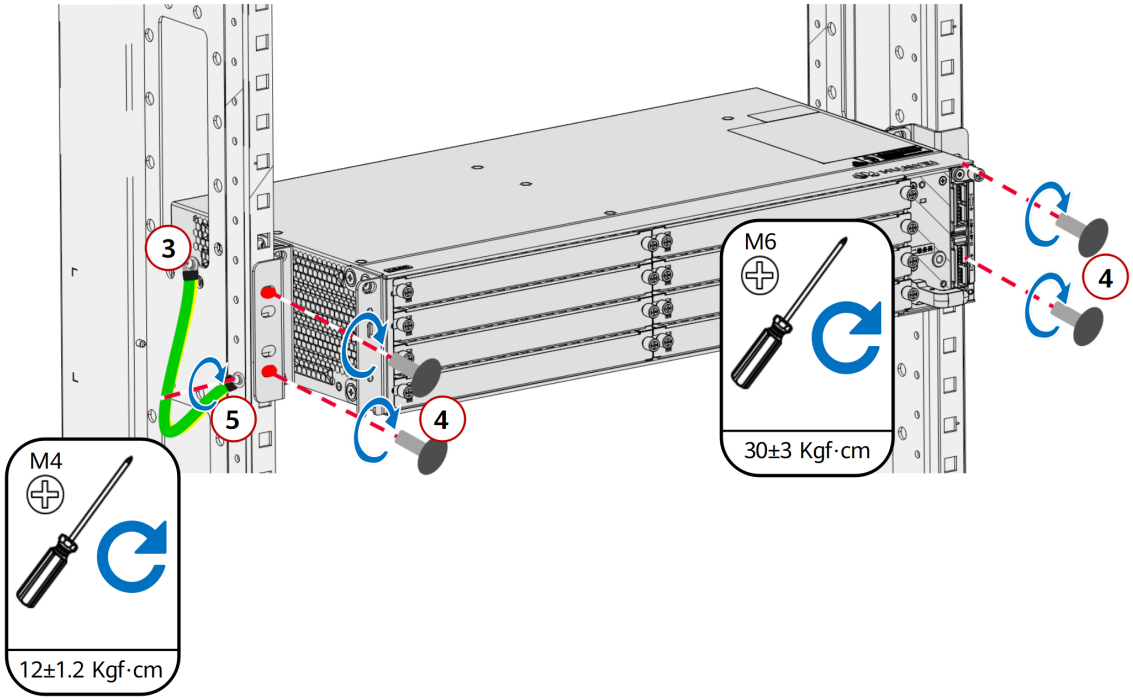
Scenario 3: Installing a Chassis in an ETSI Cabinet with Middle Columns (Continued)

NOTE

When the chassis is installed in an ETSI cabinet with a middle column, use the conversion mounting ears and the default mounting ears of the 19-inch cabinet to assemble the mounting ears of the ETSI cabinet.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Assemble the left mounting ears for the ETSI cabinet. Assemble the conversion mounting ears and the new 19-inch mounting ears on the left side into the mounting ears of the ETSI cabinet by using fixing bolts, and then install the mounting ears on the middle left side of the chassis.
2	Remove the original 19-inch mounting ears on the right side of the cabinet, use bolts to assemble the conversion mounting ears and the removed right mounting ears into the mounting ears of the ETSI cabinet, and then install the mounting ears on the middle right side of the chassis.
3	Install the PGND cable at the ground point on the left side of the chassis. For details, see "Installing the PGND Cable of the Chassis".
4	Install the chassis in the ETSI cabinet and secure the chassis using M6 panel screws.
5	Connect the other end of the PGND cable to the nearest ground point of the cabinet.

Precautions	
1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.
2	When installing the chassis, protect the optical fibers installed in the chassis. Do not pull or squeeze the optical fibers.
3	Ensure that the installation space is sufficient before installing the chassis. If the installation space is insufficient, remove the fibers that are attached on the top of the chassis before installing the chassis.
4	The chassis should be installed from the bottom layer to the top layer. Determine the mounting holes before installing the chassis in the cabinet. Then install the floating nuts in the mapping mounting holes on the cabinet.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	Conversion mounting ear	2	Mounting ears for the 19-inch cabinet	3	Panel screw	HUAWEI
4		5		6		

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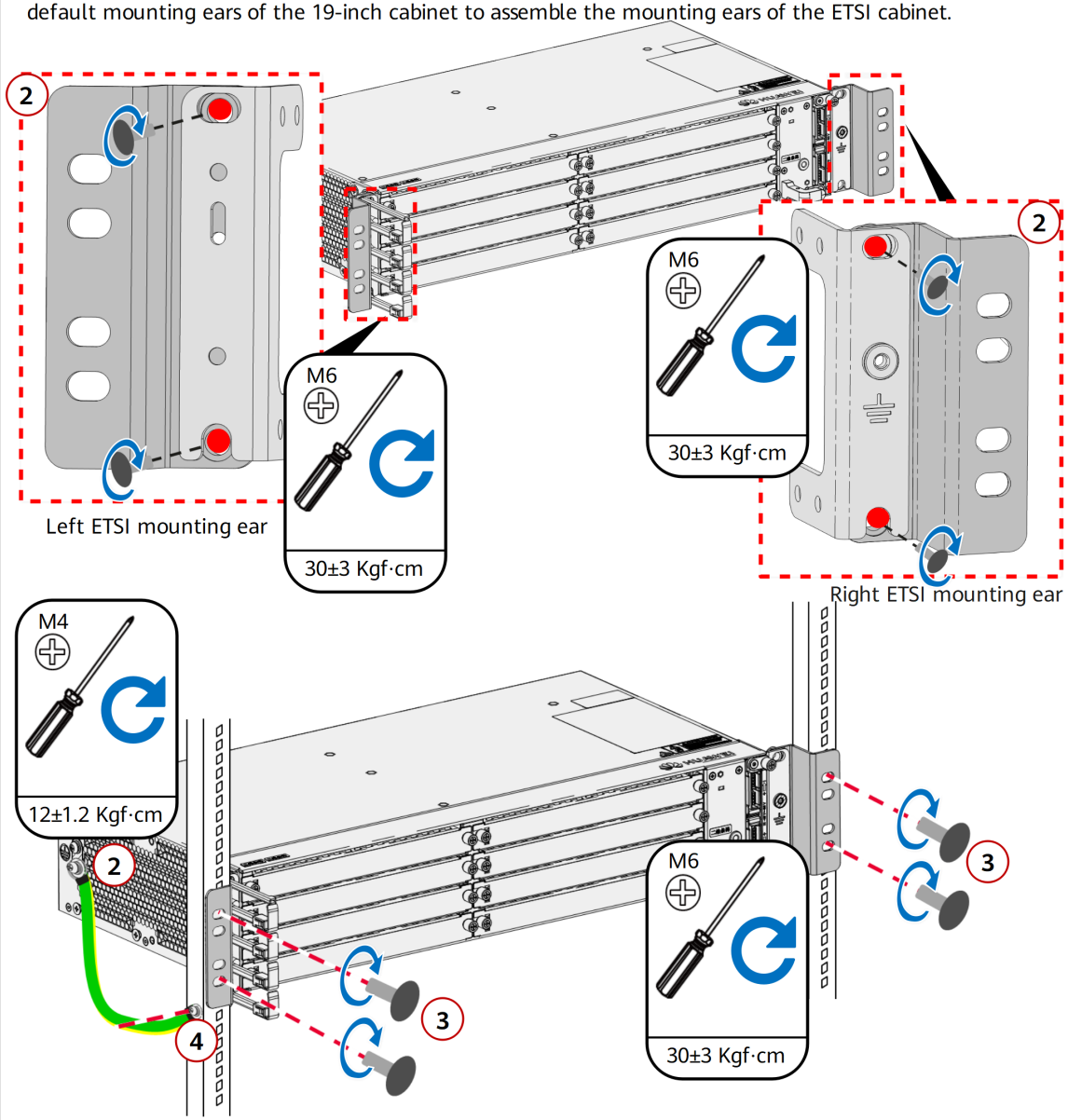
Scenario 4: Installing a Chassis in an ETSI Cabinet with Front Columns

NOTE

When installing the chassis in the ETSI cabinet with front columns, use the conversion mounting ears and the default mounting ears of the 19-inch cabinet to assemble the mounting ears of the ETSI cabinet.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Assemble the mounting ears for the ETSI cabinet. Install the two conversion mounting ears on the left and right mounting ears of the original chassis by using fixing bolts. Then, combine the two conversion mounting ears into a mounting ear that is applicable to the ETSI cabinet.
2	Install the PGND cable at the ground point on the left side of the chassis. For details, see "Installing the PGND Cable of the Chassis".
3	Install the chassis in the ETSI cabinet and secure the chassis using M6 panel screws.
4	Connect the other end of the PGND cable to the nearest ground point of the cabinet.

Precautions	
1	By default, the mounting ears of the 19-inch cabinet are installed in the chassis before delivery.
2	When installing the chassis, protect the optical fibers installed in the chassis. Do not pull or squeeze the optical fibers.
3	Ensure that the installation space is sufficient before installing the chassis. If the installation space is insufficient, remove the fibers that are attached on the top of the chassis before installing the chassis.
4	The chassis should be installed from the bottom layer to the top layer. Determine the mounting holes before installing the chassis in the cabinet. Then install the floating nuts in the mapping mounting holes on the cabinet.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	Conversion mounting ear	2	Mounting ears for the 19-inch cabinet	3	Panel screw	HUAWEI
4	Ground screw	5		6		

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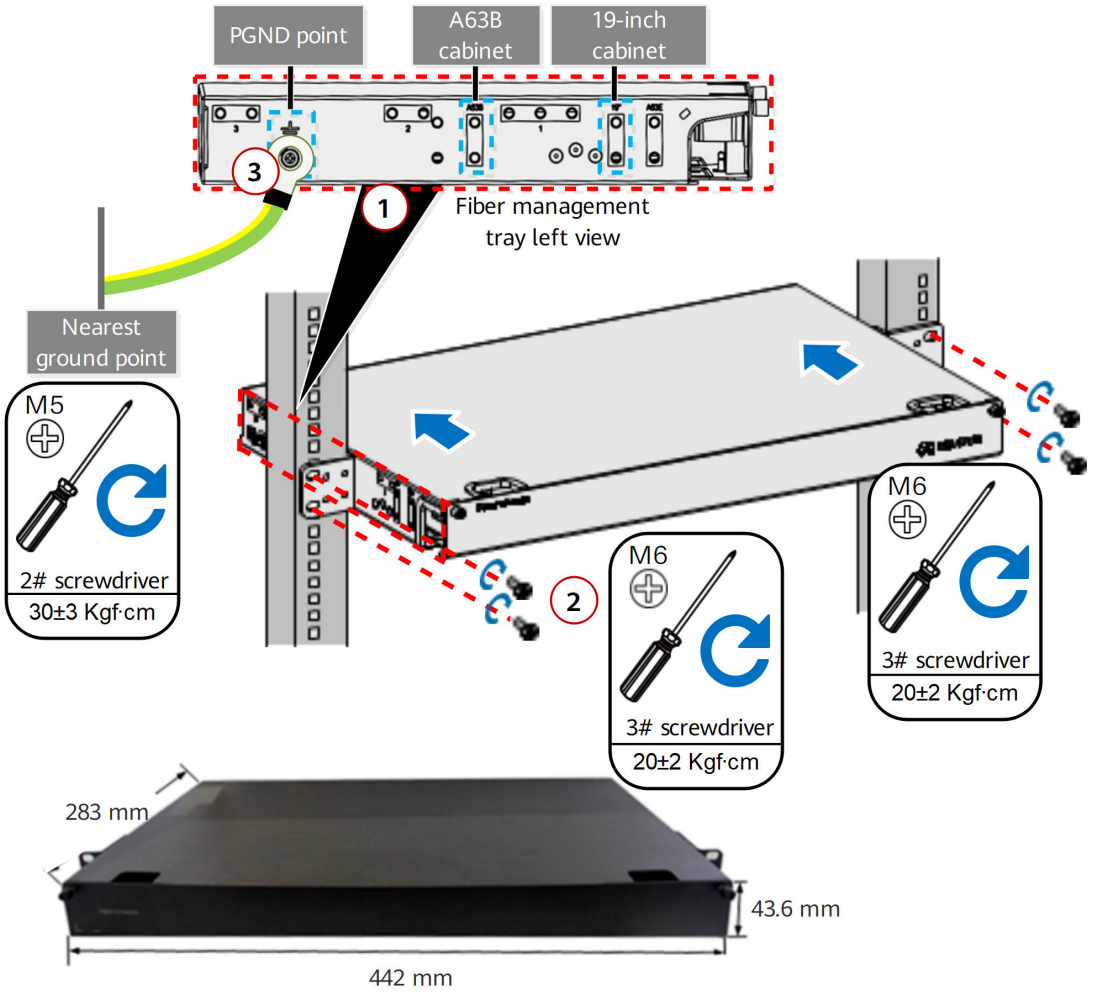
(Optional) Installing a Fiber Management Tray



WARNING

When handling optical fibers, do not stand close to or look into the optical fiber outlet directly without eye protection.

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Select the station for mounting ears and install the mounting ears.
2	Install the fiber management tray to the corresponding cabinet and fix it with panel screws.
3	(Optional) Install the PGND cable on the side of the fiber tray, and connect the other end of the PGND cable to the nearest ground point.

Precautions	
1	The fiber management tray is an optional accessory, which can be purchased separately.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	PGND cable	2	Fiber management tray	3		HUAWEI
4		5		6		

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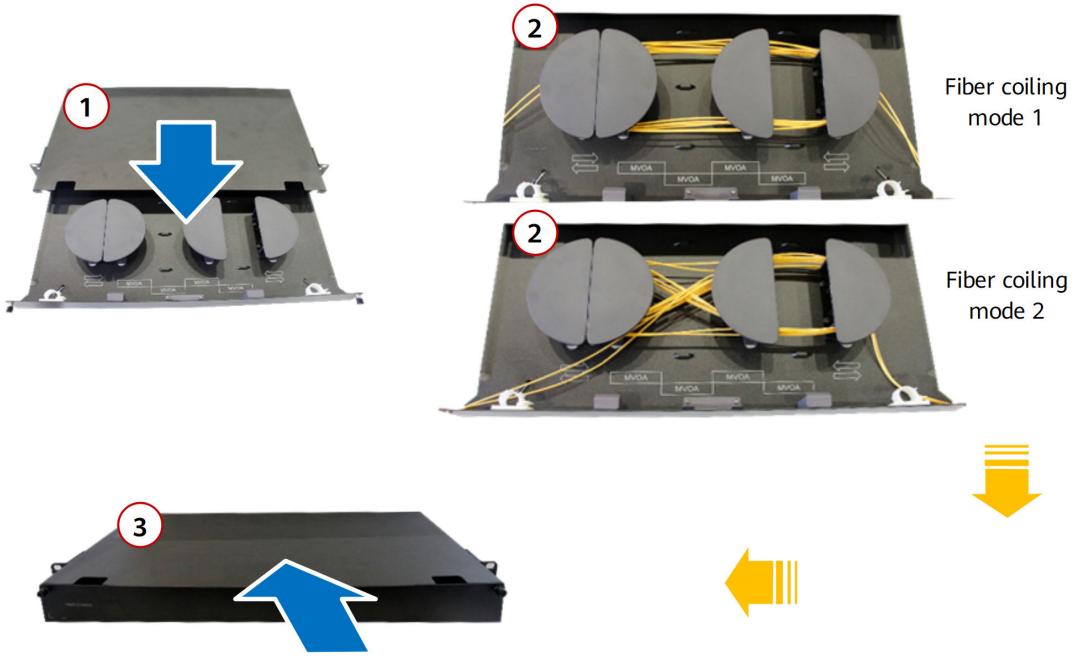
(Optional) Coiling Fibers in the Fiber Management Tray

WARNING

When handling optical fibers, do not stand close to or look into the optical fiber outlet directly without eye protection.



CAUTION

Fibers are pulled in and pulled out through the fiber management tray at the left side. When you spool fibers, raise the cap of the fiber through hole. If too many fibers need to be pulled out from the right side, reroute the fibers to the left from the bottom of the tray.

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Pull out the fiber management tray.
2	Select a proper fiber coiling mode based on site conditions and coil fibers in the fiber management tray according to the figure.
3	Cover the fiber management tray.

Precautions	
1	The fiber management tray is an optional accessory, which can be purchased separately.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	Fiber	2	Fiber management tray	3		HUAWEI
4		5		6		

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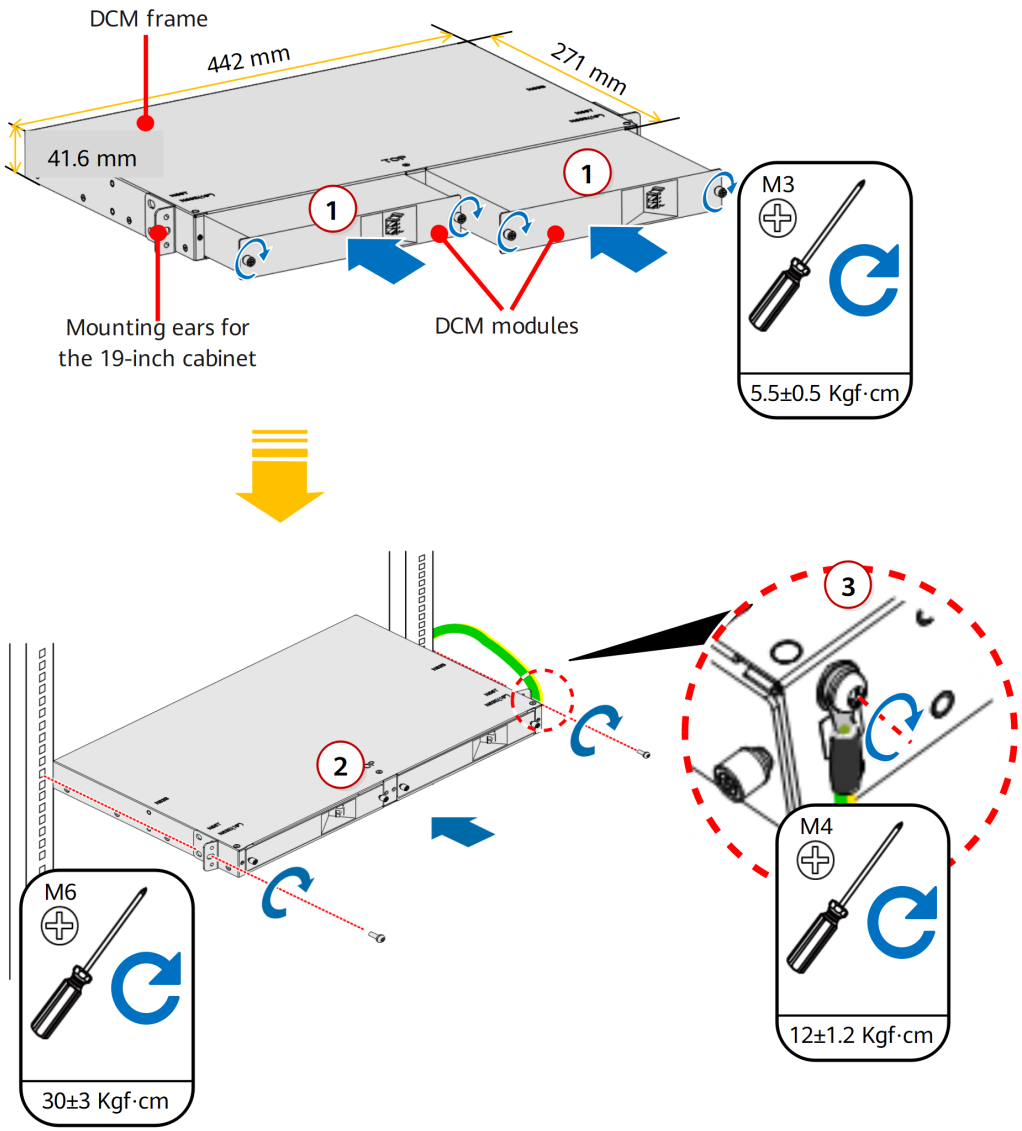
Installing a DCM Frame in a 19-inch Cabinet



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Insert DCM modules into a DCM frame, and tighten screws.
2	Install the DCM frame in the corresponding cabinet and secure it using panel screws.
3	(Optional) Install a PGND cable for the DCM.

Precautions	
1	The DCM frame can be installed in a 19-inch cabinet or an ETSI cabinet. The only difference lies in the position and direction of the mounting ears. Therefore, you need to adjust the mounting ears based on the cabinet type.
2	By default, the mounting ears on both sides of the DCM frame before delivery match a 19-inch cabinet.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	DCM frame	2	PGND cable	3	Ground screw	HUAWEI
4		5		6		

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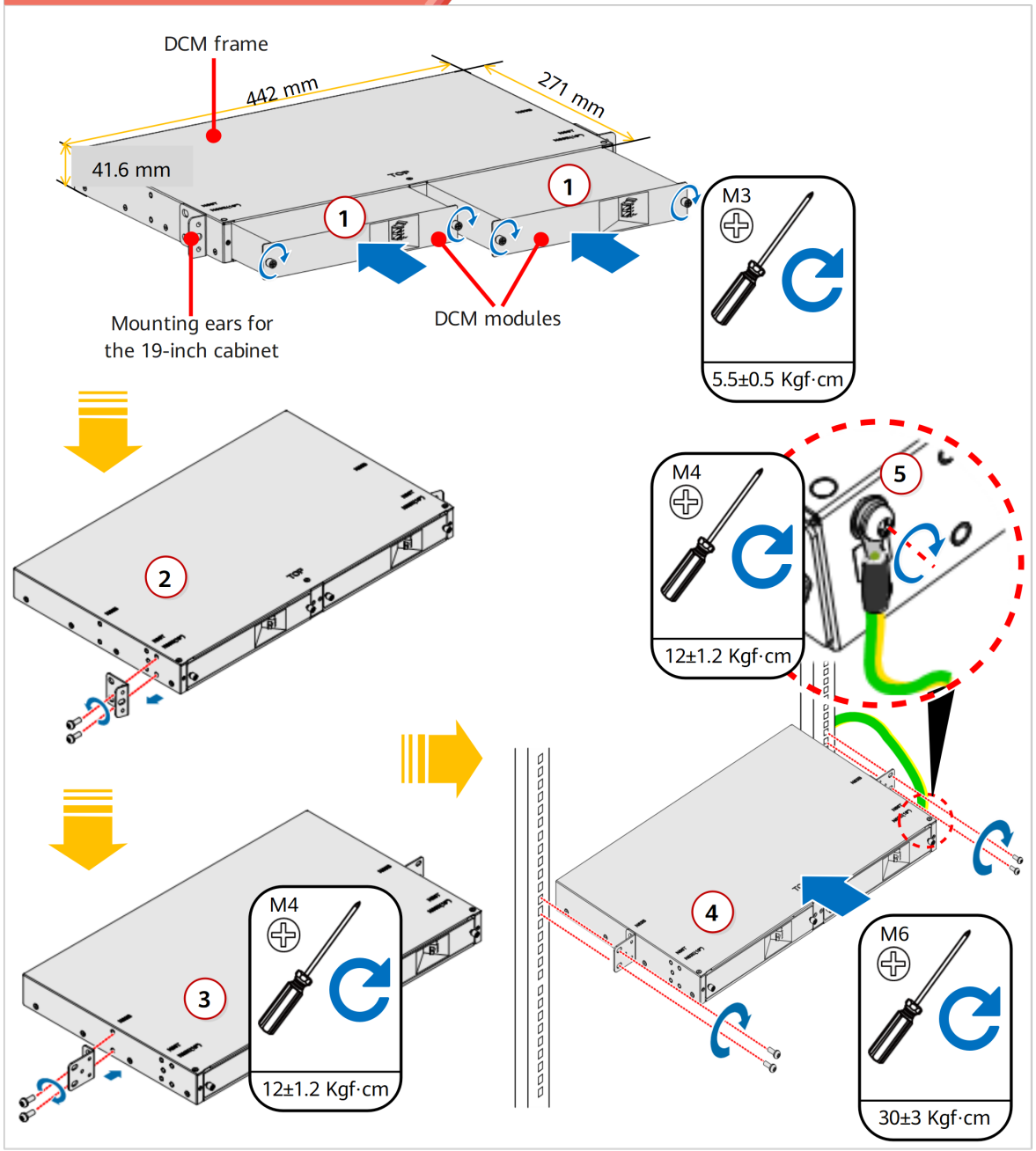
Installing a DCM Frame in an ETSI Cabinet with Middle Columns



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Insert DCM modules into a DCM frame, and tighten screws.
2	Remove the mounting ears from the DCM frame. Remove the original mounting ears from both sides of the subrack.
3	Adjust the direction of the mounting ears on the DCM frame. Select the short edge of the mounting ear and install it in the middle of the subrack.
4	Install the fiber management tray in the corresponding cabinet and secure it using panel screws.
5	(Optional) Install a PGND cable for the DCM frame.

Precautions	
1	The DCM frame can be installed in a 19-inch cabinet or an ETSI cabinet. The only difference lies in the position and direction of the mounting ears. Therefore, you need to adjust the mounting ears based on the cabinet type.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials						
1	DCM frame	2	PGND cable	3	Ground screw	HUAWEI
4		5		6		

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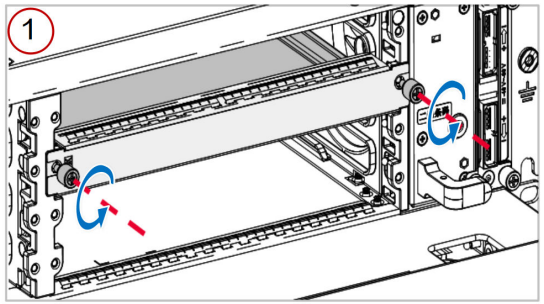
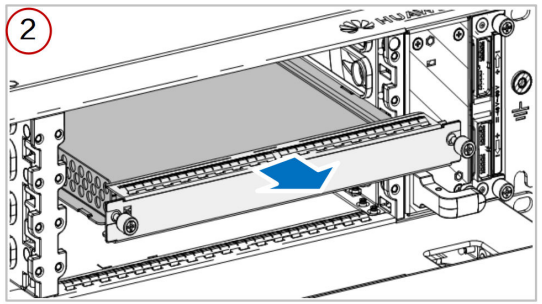
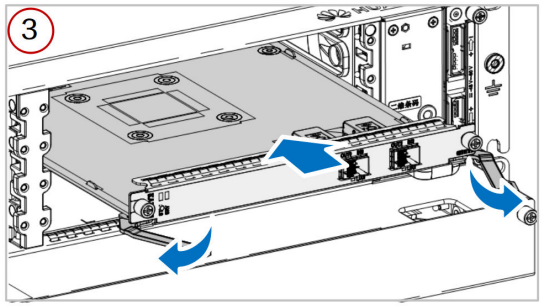
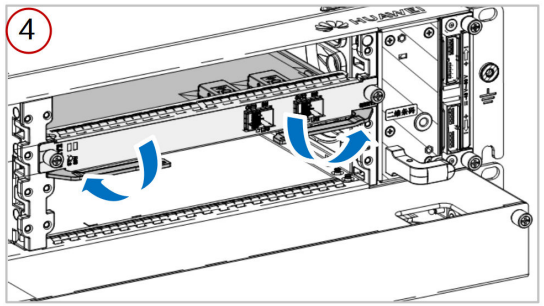
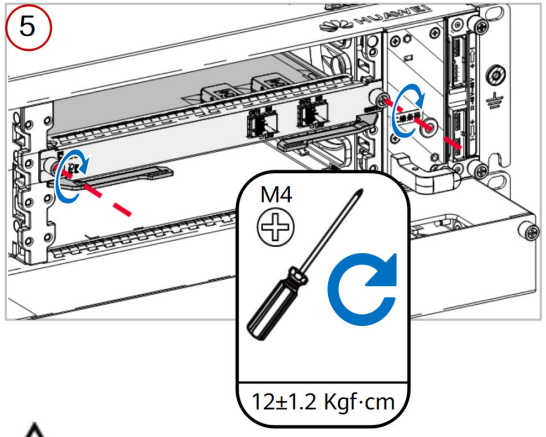
(Optional) Installing a Single-Slot Board





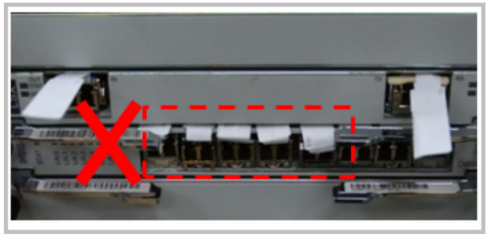






CAUTION

When inserting or removing a board, ensure that the module label is not inserted with the board.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Loosen the screws on the filler panel.
2	Remove the filler panel slowly.
3	Turn the ejector levers on both sides of the board to the maximum angle, and then steadily insert the board along the guide rails until the board cannot slide forward.
4	Fasten the left and right ejector levers of the board panel until they cannot be pushed any further. In this case, the ejector levers are in the extreme installation position and the board is fully inserted. After you release the ejector levers, the ejector levers automatically return to the normal installation position.
5	Use a screwdriver to tighten the captive screws on both sides of the ejector levers.

Precautions	
1	When removing or inserting a board, wear an ESD wrist strap or ESD gloves.
2	If you feel resistance when inserting a board, do not forcibly insert the board. Instead, pull out the board, adjust its position, and insert it again.
3	When installing or replacing a board, remove or re-insert only the corresponding filler panel. Do not remove other filler panels.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials					
1	Board	2	Filler panel	3	
4		5		6	

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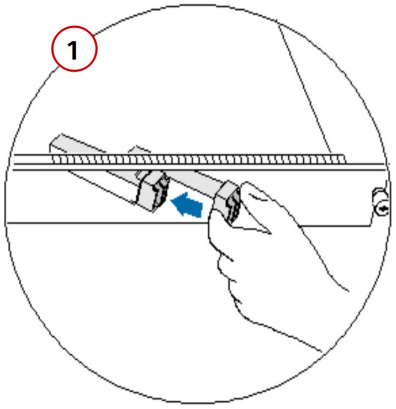
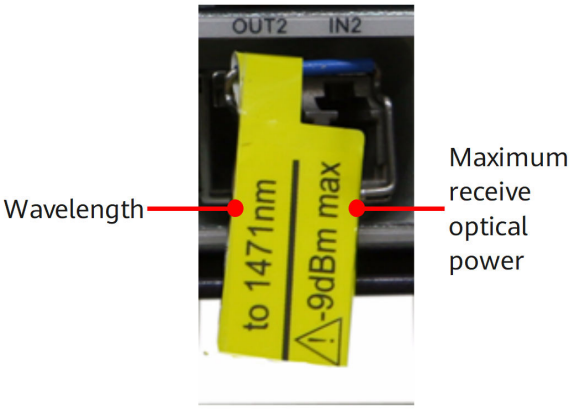
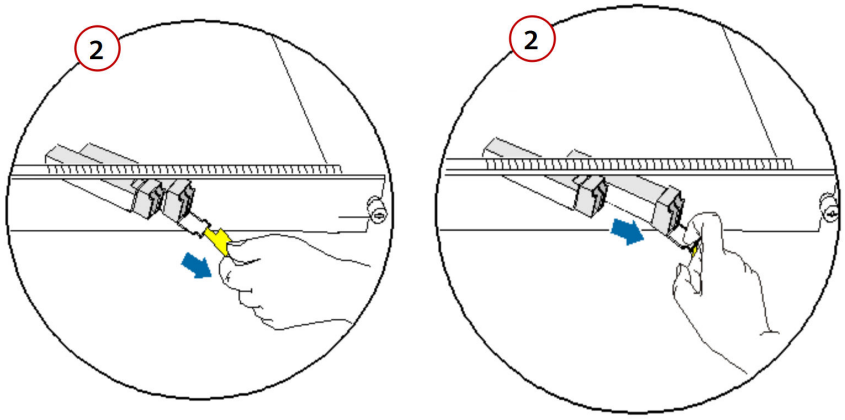
Inserting or Removing Optical Modules





CAUTION

Pull the ring to remove the optical module. Do not pull the label to remove the optical module.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Inserting optical modules. Hold the optical module and then insert it to the board.
2	Removing optical modules. Pull the label on the ring of the optical module so that the ring is in the horizontal position.

Precautions	
1	Pull the ring to remove the optical module. Do not pull the label to remove the optical module.

Installation Tools					
1	ESD gloves	2		3	
4		5		6	

Installation Materials					
1	Optical module	2		3	
4		5		6	

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Selecting Cabinet Power Cables and Copper Fittings

External power cable types

NEG(-)	RTN(+)	
Blue	Black	Red

CAUTION

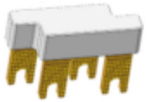
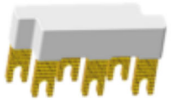
The conductor of electricity of power cable must be inserted into the DC connector absolutely.

CAUTION

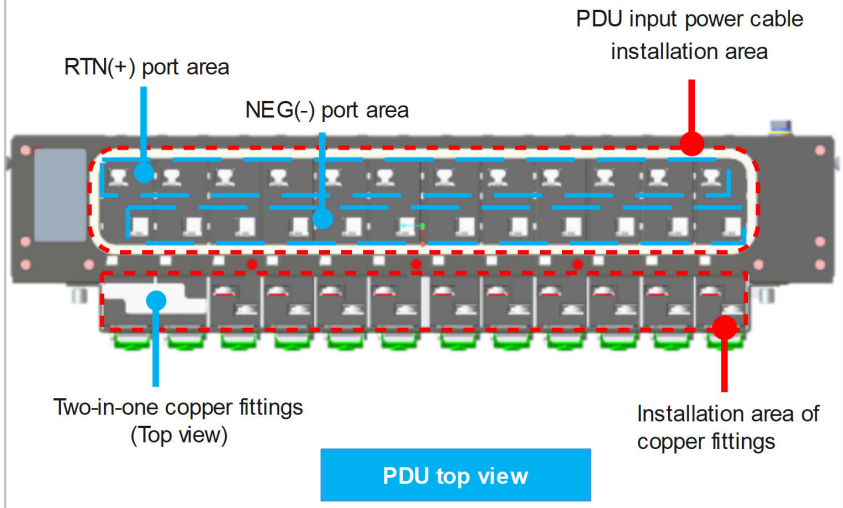
Do not install or remove power cables while the power is on. Ensure that the cabinet power is switched off prior to removing or installing a power cable to avoid bodily injuries.

NOTE

This document uses the black RTN(+) power cable as an example.

Scenario	PDU Input Current (A)	Using Copper Fittings	Power Cable Length (m)	Power Cable Cross-Sectional Area (mm²)	Terminal Type
6*E6608	32	Not using copper fittings	≤37	16	The end connected to the DPD60-12-12B is a cord end terminal.
			37 ~ 57	25	
			57 ~ 81	35	
	63	Using two-in-one copper fittings 	≤18	16	
			18 ~ 29	25	
			29 ~ 41	35	
	100	Using three-in-one copper fittings 	≤25	35	

DC Power Distribution Box



NOTE

Determine the required power cables for connecting the PDF to the PDU against the following table. If the length and cross-sectional area of the power cable do not conform to the specifications listed in the following table, consult with the product manager at your local representative office.

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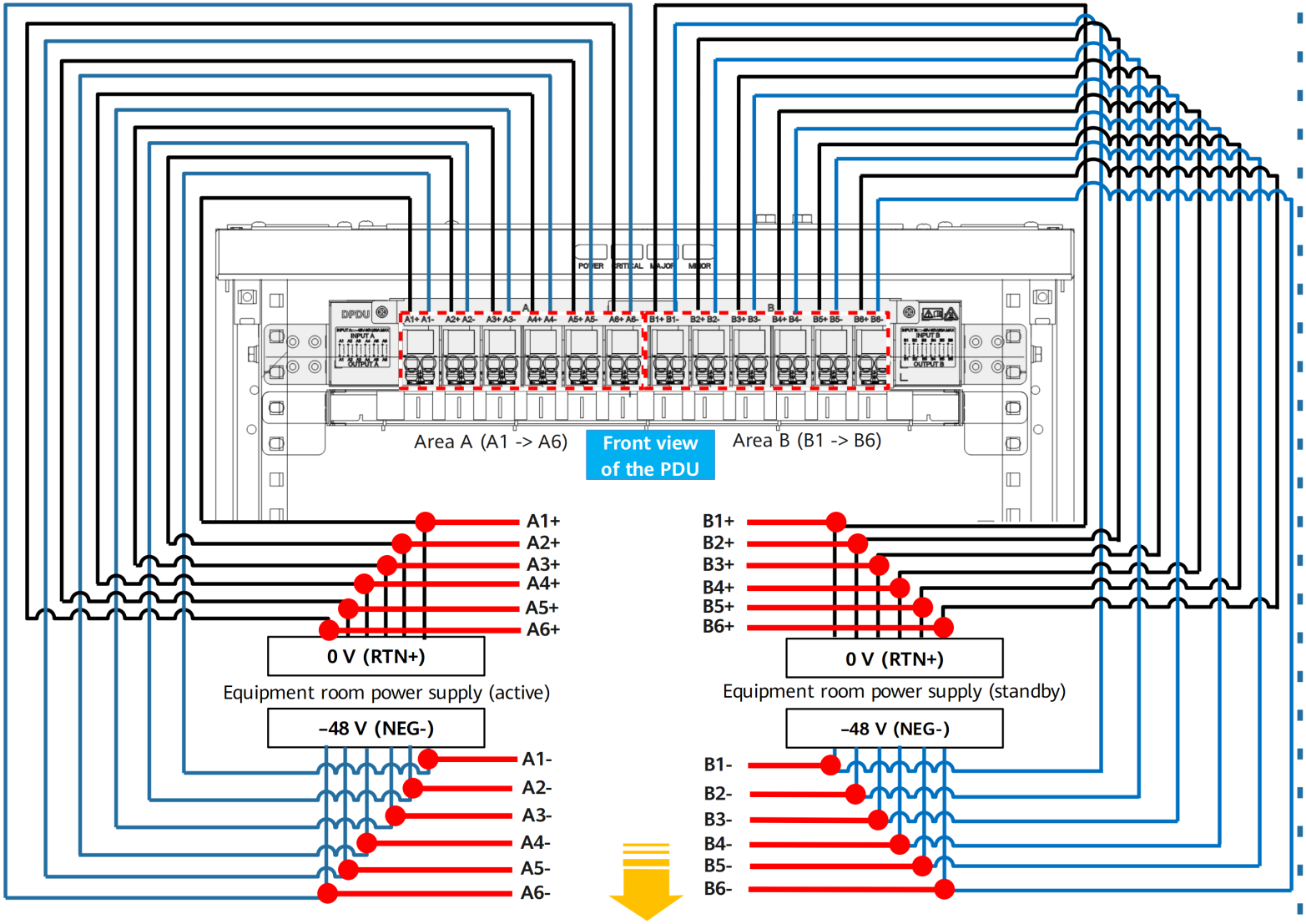
Installing External Input Power Cables for the PDU (Not Using Copper Fittings)

CAUTION

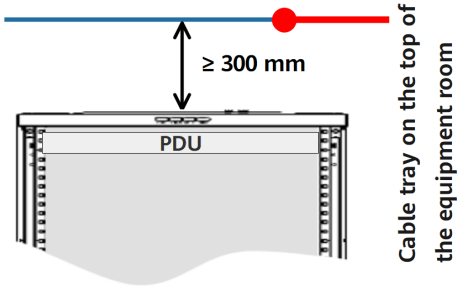
To ensure the reliability of the power supply of the device, two independent power supplies are required for the upstream device.

Connections between the PDU circuit breaker module and the external power cables



CAUTION

When installing a cabinet, reserve at least 300 mm (11.81 in.) on the top of the cabinet to facilitate the installation of external input power cables for the PDU.



CAUTION

- Before installing the external input power cables for the PDU, remove the rubber cover in the first row on the top of the cabinet to facilitate observation of the PDU cable holes. After connecting the cables, re-install the rubber cover in the first row.
- When installing the external input power cables of the PDU, do not perform any operations (such as cutting power cables on the cable tray or stacking screws on the top of the cabinet) other than cabling on the top of the cabinet. Otherwise, foreign objects may fall onto the device from the top of the cabinet, causing the device to malfunction.

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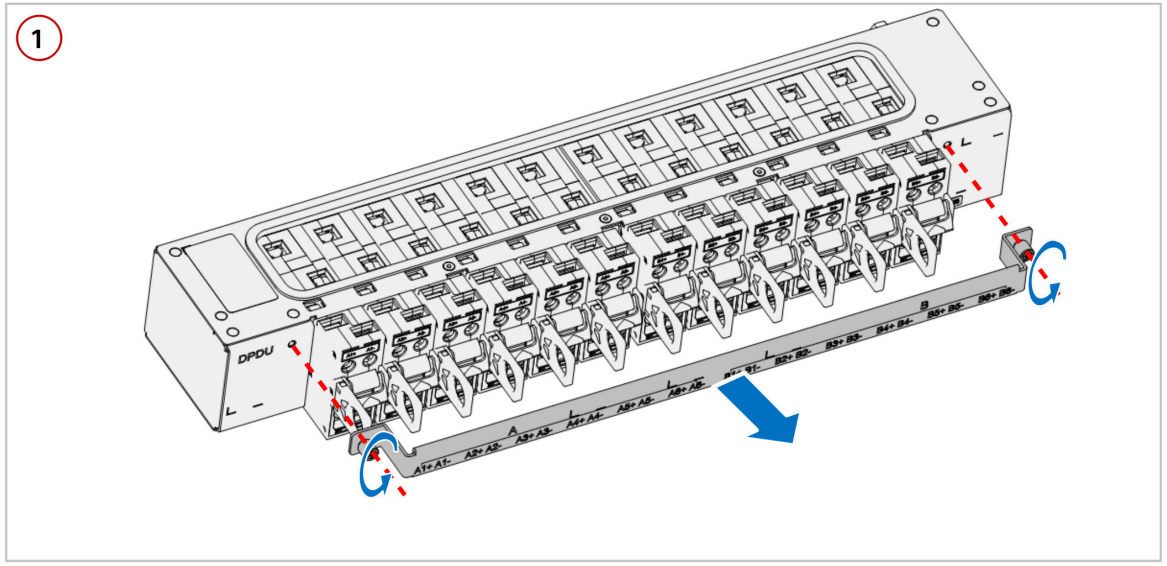
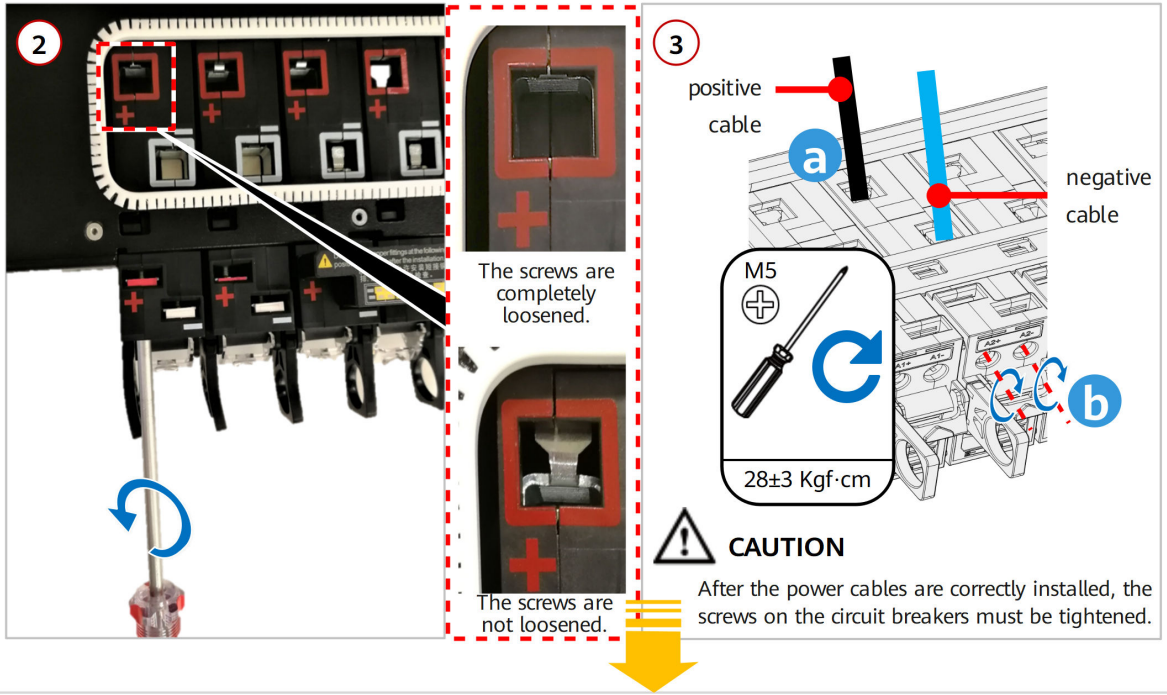
Installing External Input Power Cables for the PDU (Not Using Copper Fittings) (Continued)





Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Loosen the two screws on the front cover of the PDU and remove the front cover.
2	Loosen all the screws that secure the circuit breakers. Use a screwdriver to loosen the screws on all circuit breakers to the maximum extent.
3	Install the PDU input power cables and tighten all the screws on the corresponding circuit breakers.
4	Verify that the positive and negative input power cables of the PDU are correctly connected.
5	Use a Phillips screwdriver to check whether all screws on the circuit breaker are tightened.
6	Re-install the front cover of the PDU, and use a screwdriver to tighten the screws on the front cover.

Precautions	
1	The PDU input power cables should be properly connected to the positive and negative terminals of the PDU respectively.
2	To replace a circuit breaker, disconnect the power supply, loosen the screws, remove the power cable, and then remove the circuit breaker. If it is difficult to remove a circuit breaker, push it inwards and try again.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials					
1	Power cable	2		3	
4		5		6	

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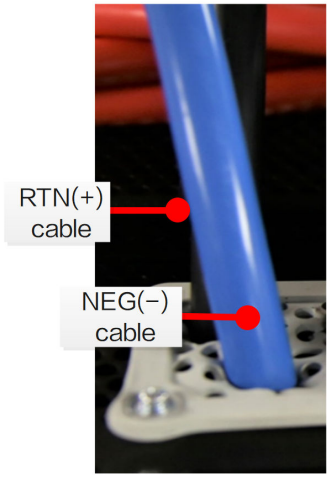
Installing External Input Power Cables for the PDU (Not Using Copper Fittings) (Continued)

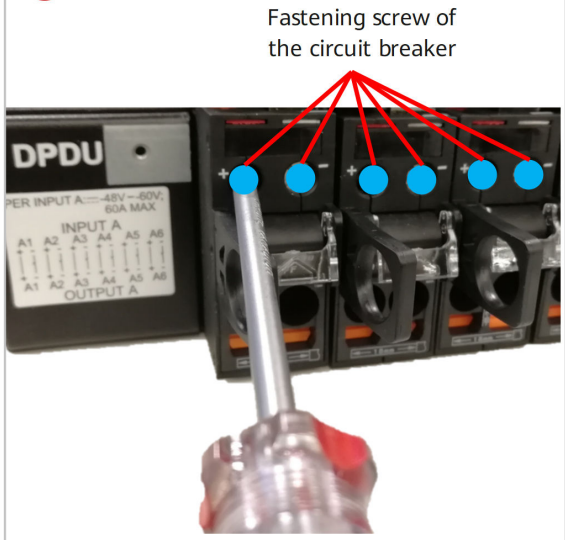
4



CAUTION

When you look at the PDU from the front, connect the negative power cable (blue) to the front and the positive power cable (black) to the rear.

5



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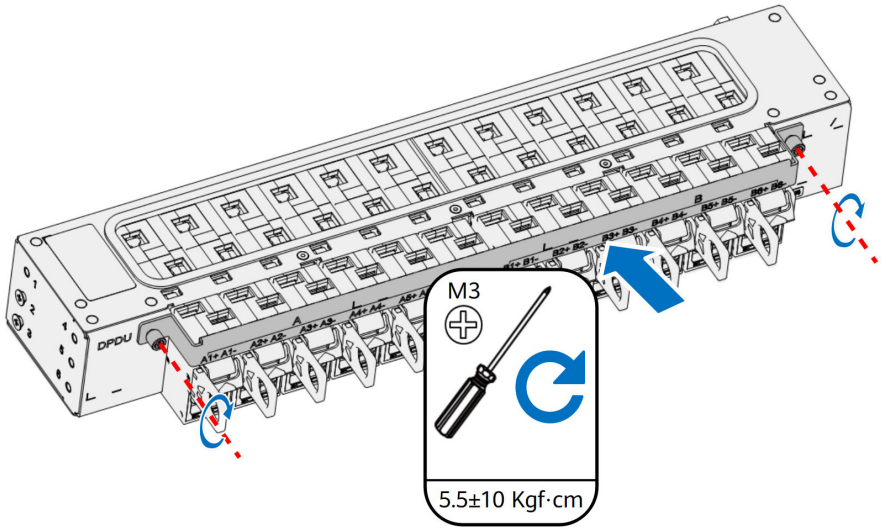

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Loosen the two screws on the front cover of the PDU and remove the front cover.
2	Loosen all the screws that secure the circuit breakers. Use a screwdriver to loosen the screws on all circuit breakers to the maximum extent.
3	Install the PDU input power cables and tighten all the screws on the corresponding circuit breakers.
4	Verify that the positive and negative input power cables of the PDU are correctly connected.
5	Use a Phillips screwdriver to check whether all screws on the circuit breaker are tightened.
6	Re-install the front cover of the PDU, and use a screwdriver to tighten the screws on the front cover.

Precautions	
1	The PDU input power cables should be properly connected to the positive and negative terminals of the PDU respectively.
2	To replace a circuit breaker, disconnect the power supply, loosen the screws, remove the power cable, and then remove the circuit breaker. If it is difficult to remove a circuit breaker, push it inwards and try again.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials					
1	Power cable	2		3	
4		5		6	

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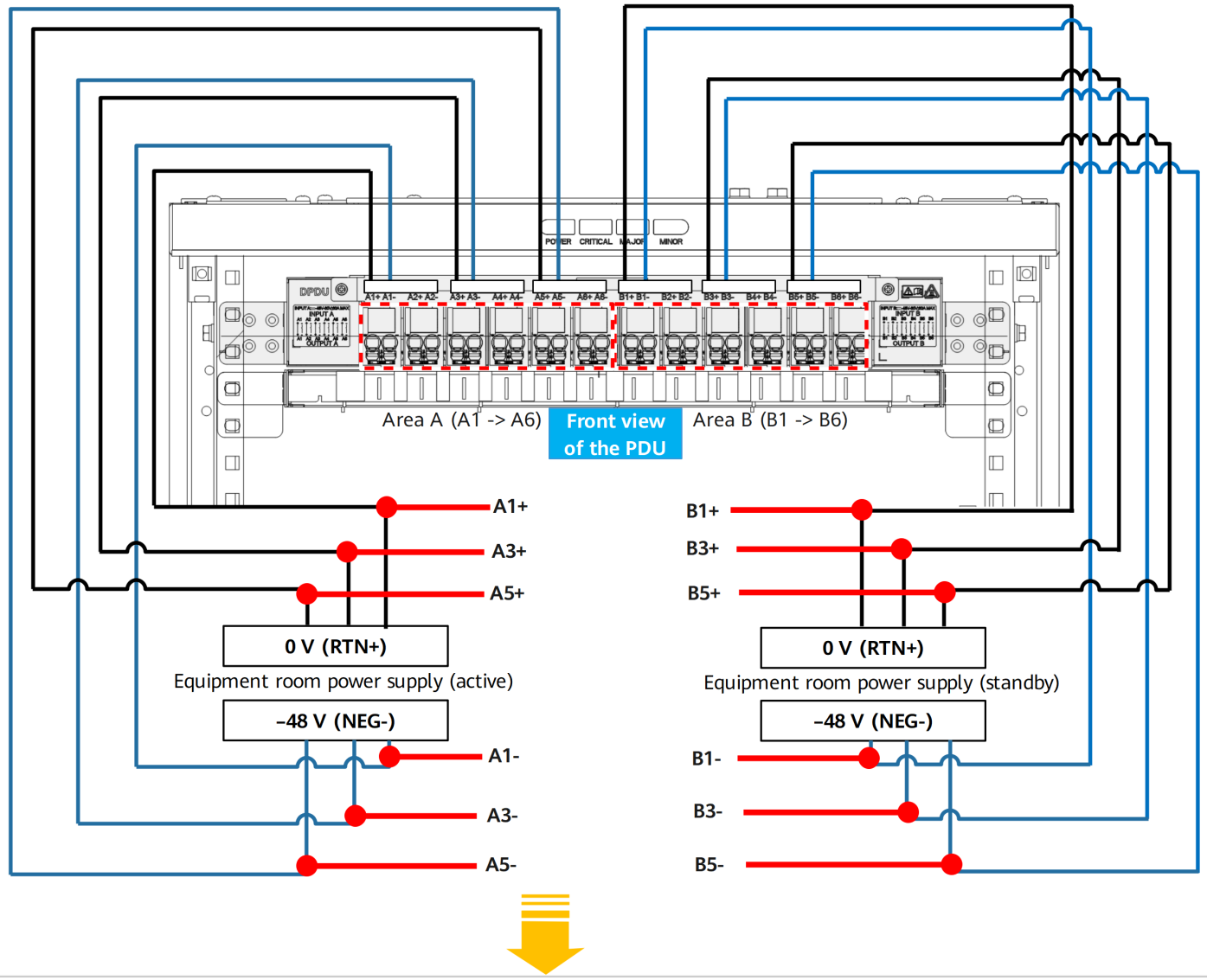
Installing External Input Power Cables for the PDU (Using Two-in-One Copper Fittings)

CAUTION

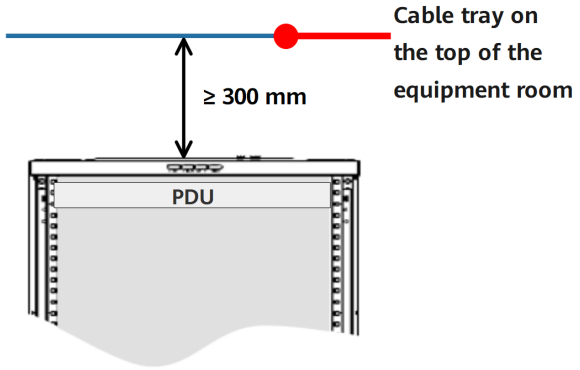
To ensure the reliability of the power supply of the device, two independent power supplies are required for the upstream device.

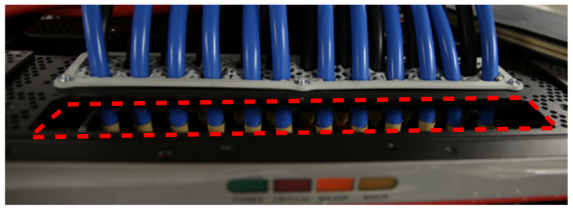
Connections between the PDU circuit breaker module and the external power cables



CAUTION

When installing a cabinet, reserve at least 300 mm (11.81 in.) on the top of the cabinet to facilitate the installation of external input power cables for the PDU.





CAUTION

- Before installing the external input power cables and copper fittings for the PDU, remove the rubber cover in the first row on the top of the cabinet to facilitate observation of the PDU cable holes. After connecting the cables (including the copper fittings), re-install the rubber cover in the first row.
- When installing the external input power cables of the PDU, do not perform any operations (such as cutting power cables on the cable tray or stacking screws on the top of the cabinet) other than cabling on the top of the cabinet. Otherwise, foreign objects may fall onto the device from the top of the cabinet, causing the device to malfunction.

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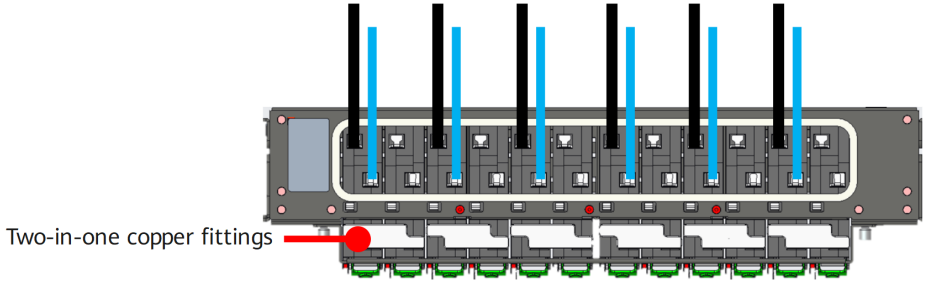
Installing External Input Power Cables for the PDU (Using Two-in-One Copper Fittings) (Continued)

CAUTION

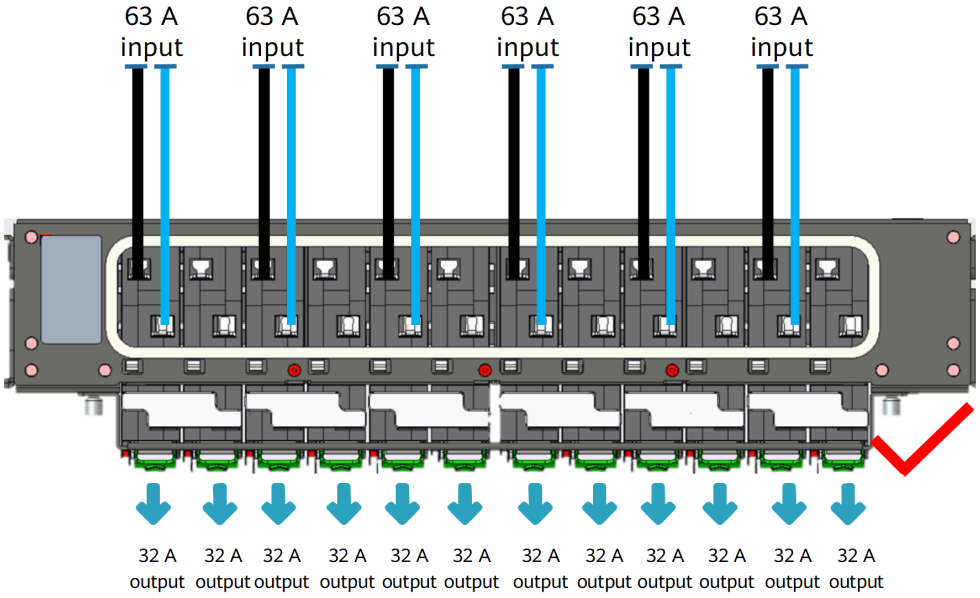
If two-in-one copper fittings are used, install them by strictly following the recommended method. If you want to use another method, contact Huawei engineers to ensure that the power supply is normal.



Recommended installation mode for two-in-one copper fittings

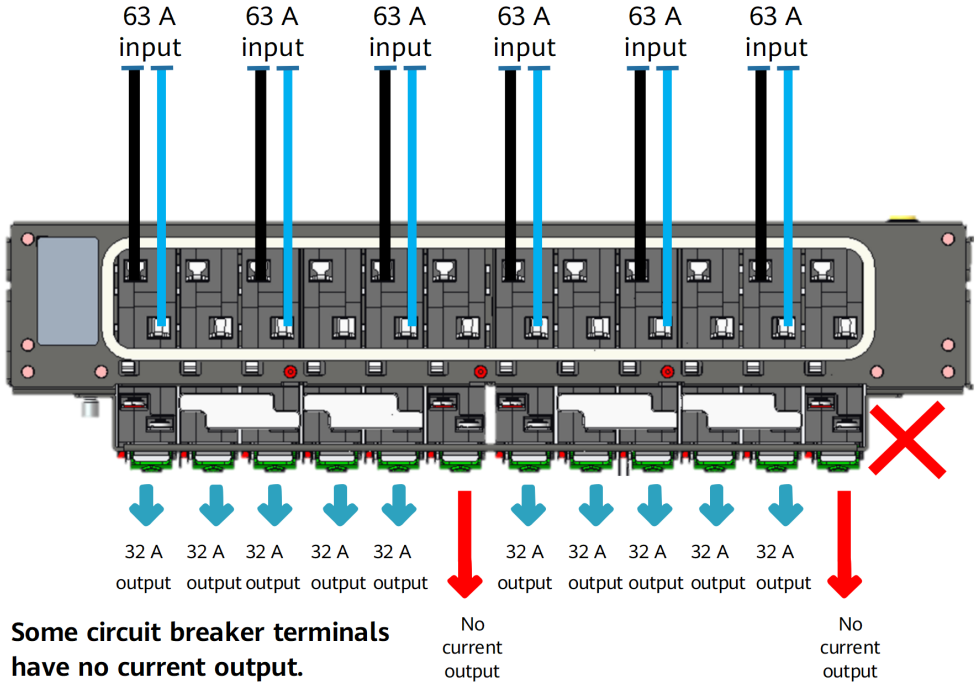
Case Description

The customer equipment room provides 3+3 63 A power inputs.



All circuit breaker terminals have current outputs.

The customer equipment room provides 3+3 63 A power inputs.



Some circuit breaker terminals have no current output.

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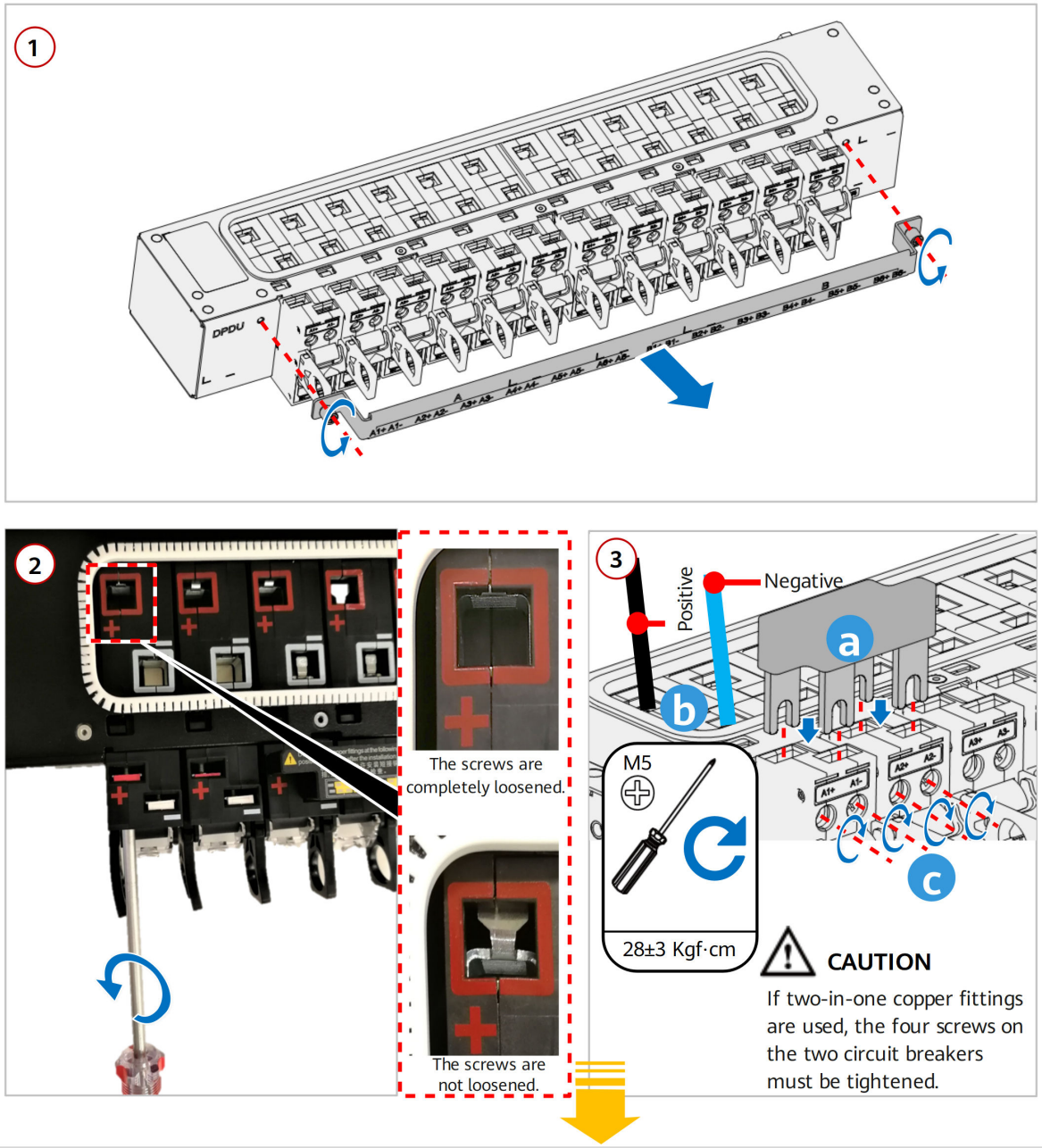
Installing External Input Power Cables for the PDU (Using Two-in-One Copper Fittings) (Continued)



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Loosen the two screws on the front cover of the PDU and remove the front cover.
2	Loosen all the screws that secure the circuit breakers. Use a screwdriver to loosen the screws on all circuit breakers to the maximum extent.
3	Install copper fittings, install the PDU input power cables, and then tighten all the screws on the corresponding circuit breakers.
4	Check whether the copper fittings are properly installed.
5	Verify that the positive and negative input power cables of the PDU are correctly connected.
6	Use a Phillips screwdriver to check whether all screws on the circuit breaker are tightened.
7	Re-install the front cover of the PDU, and use a screwdriver to tighten the screws on the front cover.

Precautions	
1	The PDU input power cables should be properly connected to the positive and negative terminals of the PDU respectively.
2	To replace a circuit breaker, disconnect the power supply, loosen the screws, remove the power cable, and then remove the circuit breaker. If it is difficult to remove a circuit breaker, push it inwards and try again.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials					
1	Two-in-one copper fitting	2	Power cable	3	
4		5		6	

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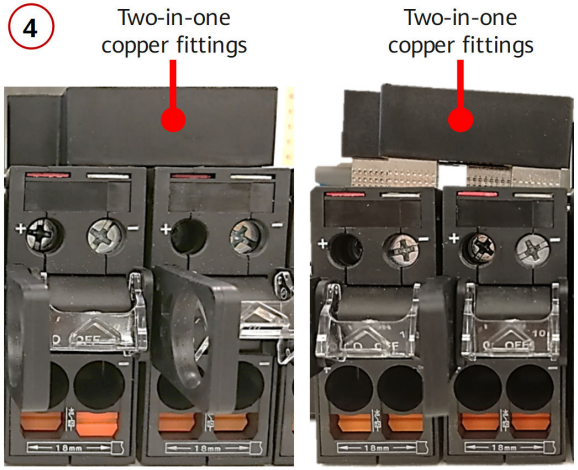
Installing External Input Power Cables for the PDU (Using Two-in-One Copper Fittings) (Continued)

4



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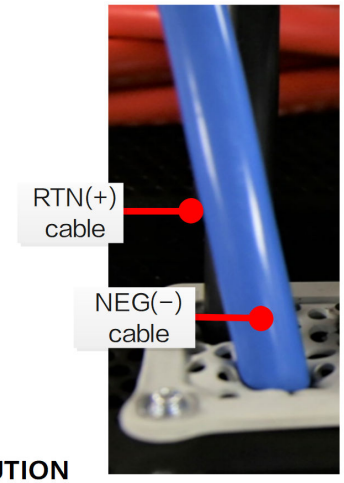
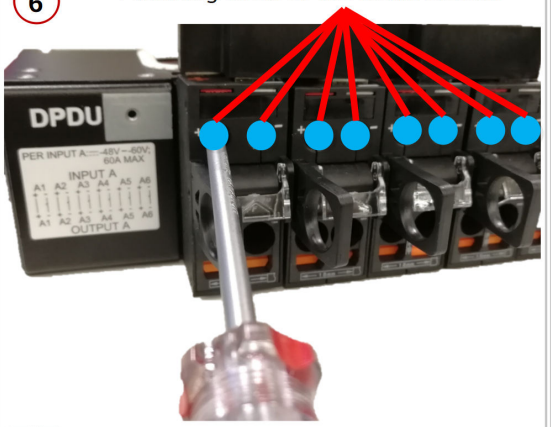


CAUTION

When you look at the PDU from the front, connect the negative power cable (blue) to the front and the positive power cable (black) to the rear.

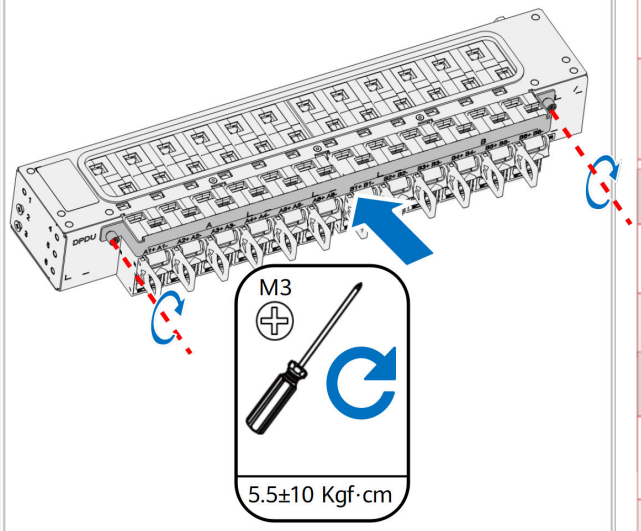
6



NOTE

When you tighten the fastening screws on the circuit breakers, the external power cables and copper fittings that are connected to the PDB are also tightened.

7



Installation No.	Installation Personnel	Installation Time

Installation Procedure

1	Loosen the two screws on the front cover of the PDU and remove the front cover.
2	Loosen all the screws that secure the circuit breakers. Use a screwdriver to loosen the screws on all circuit breakers to the maximum extent.
3	Install copper fittings, install the PDU input power cables, and then tighten all the screws on the corresponding circuit breakers.
4	Check whether the copper fittings are properly installed.
5	Verify that the positive and negative input power cables of the PDU are correctly connected.
6	Use a Phillips screwdriver to check whether all screws on the circuit breaker are tightened.
7	Re-install the front cover of the PDU, and use a screwdriver to tighten the screws on the front cover.

Precautions

1	The PDU input power cables should be properly connected to the positive and negative terminals of the PDU respectively.
2	To replace a circuit breaker, disconnect the power supply, loosen the screws, remove the power cable, and then remove the circuit breaker. If it is difficult to remove a circuit breaker, push it inwards and try again.

Installation Tools

1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials

1	Two-in-one copper fitting	2	Power cable	3	
4		5		6	

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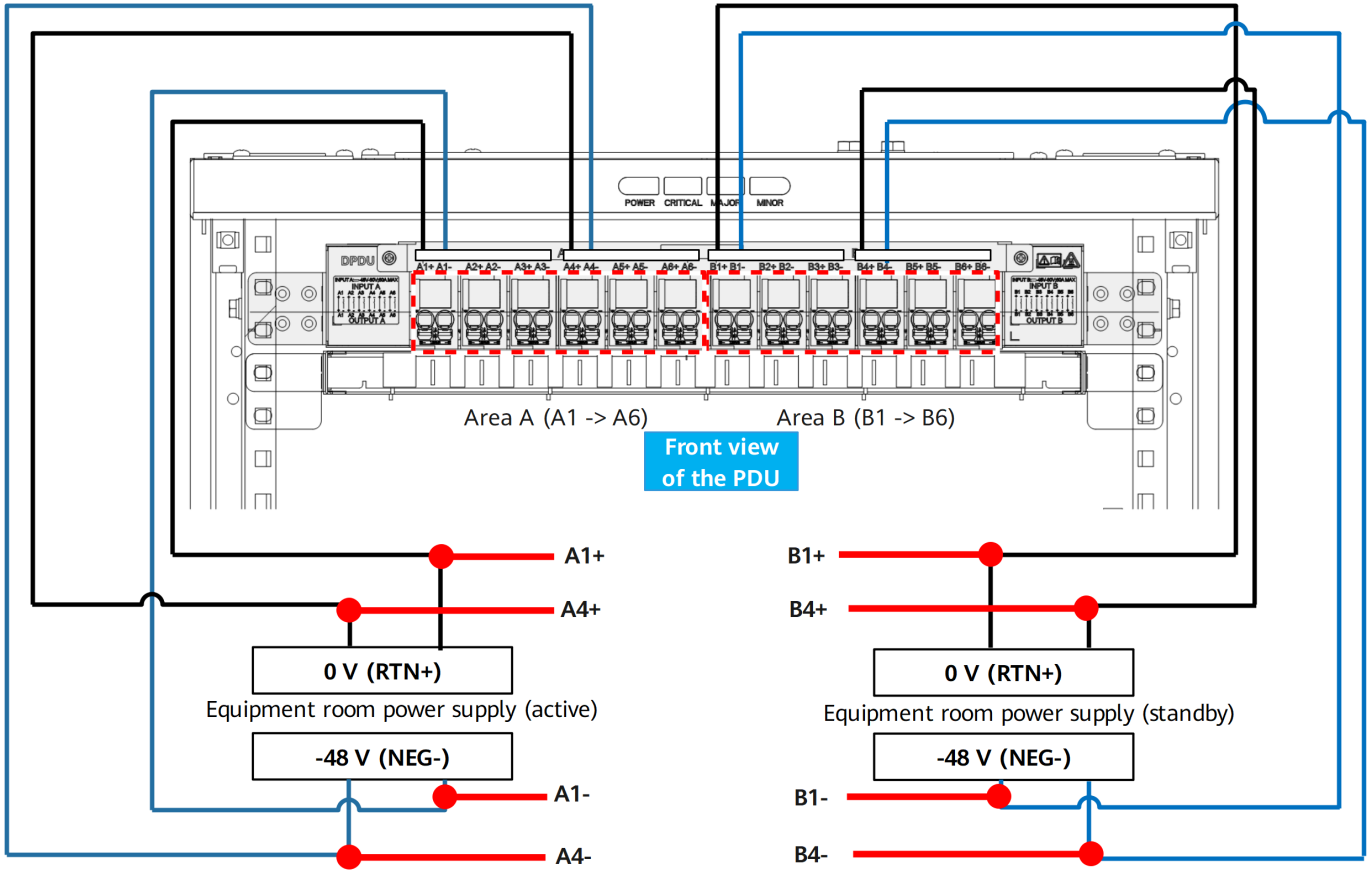
Installing External Input Power Cables for the PDU (Using Three-in-One Copper Fittings)

CAUTION

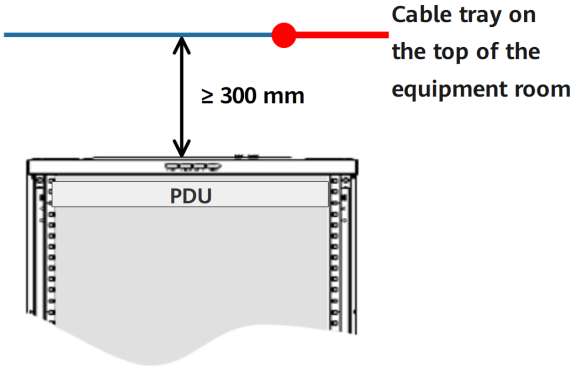
To ensure the reliability of the power supply of the device, two independent power supplies are required for the upstream device.

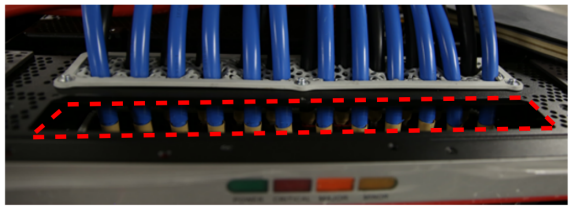
Connections between the PDU circuit breaker module and the external power cables



CAUTION

When installing a cabinet, reserve at least 300 mm (11.81 in.) on the top of the cabinet to facilitate the installation of external input power cables for the PDU.





CAUTION

- Before installing the external input power cables and copper fittings for the PDU, remove the rubber cover in the first row on the top of the cabinet to facilitate observation of the PDU cable holes. After connecting the cables (including the copper fittings), re-install the rubber cover in the first row.
- When installing the external input power cables of the PDU, do not perform any operations (such as cutting power cables on the cable tray or stacking screws on the top of the cabinet) other than cabling on the top of the cabinet. Otherwise, foreign objects may fall onto the device from the top of the cabinet, causing the device to malfunction.

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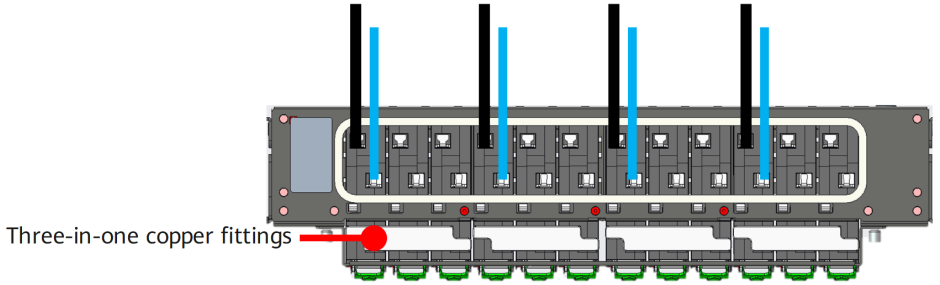
Installing External Input Power Cables for the PDU (Using Three-in-One Copper Fittings) (Continued)

CAUTION

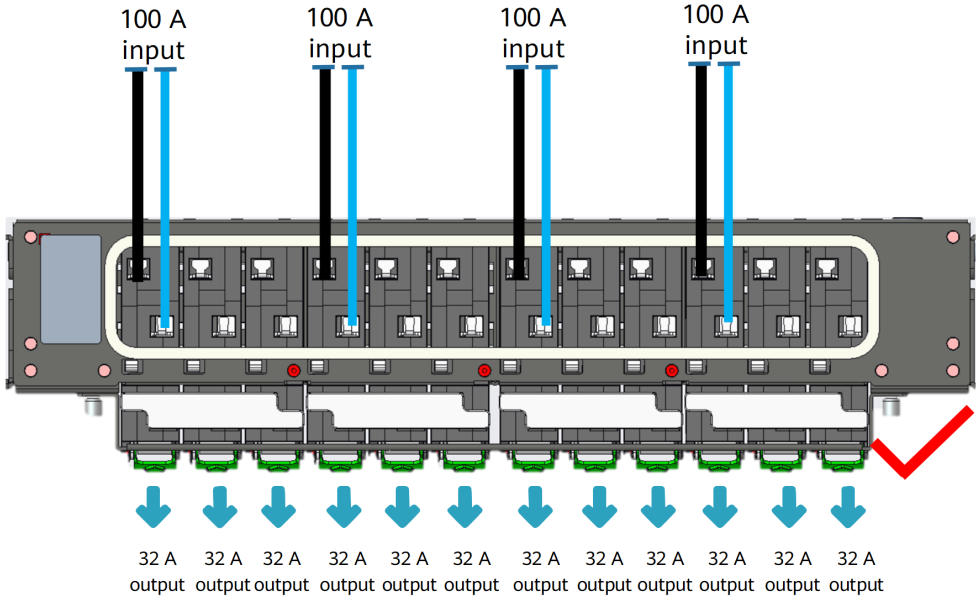
If two-in-one copper fittings are used, install them by strictly following the recommended method. If you want to use another method, contact Huawei engineers to ensure that the power supply is normal.



Recommended installation mode for three-in-one copper fittings

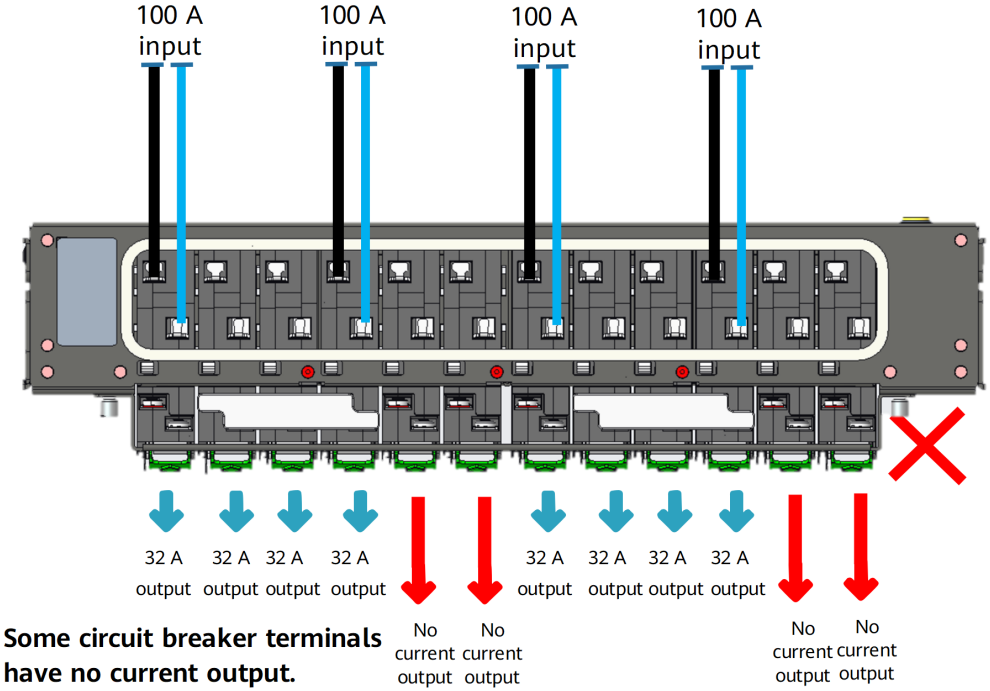
Case Description

The customer equipment room provides 2+2 100 A power inputs.



All circuit breaker terminals have current outputs.

The customer equipment room provides 2+2 100 A power inputs.



Some circuit breaker terminals have no current output.

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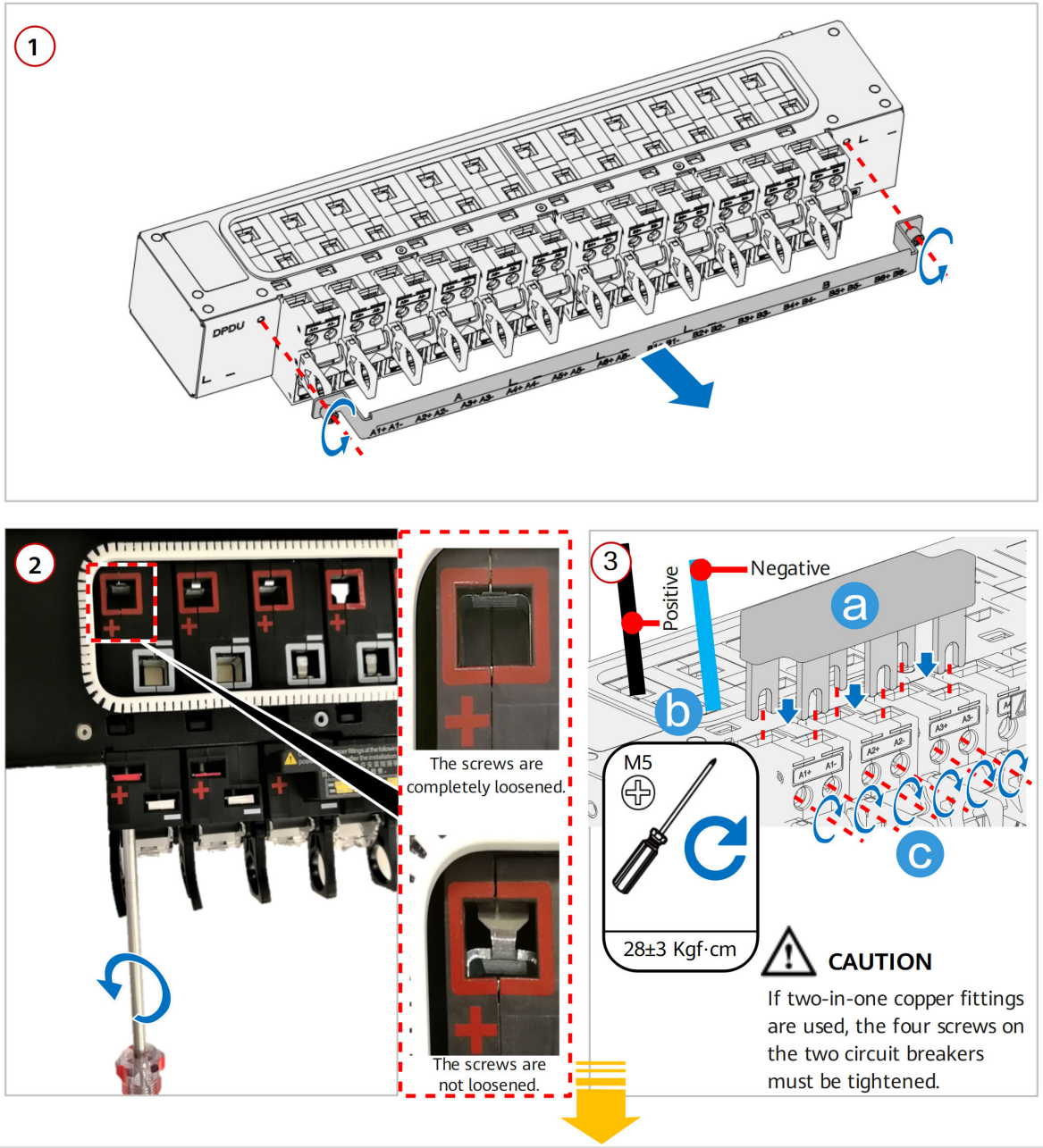
Installing External Input Power Cables for the PDU (Using Three-in-One Copper Fittings) (Continued)



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Loosen the two screws on the front cover of the PDU and remove the front cover.
2	Loosen all the screws that secure the circuit breakers. Use a screwdriver to loosen the screws on all circuit breakers to the maximum extent.
3	Install copper fittings, install the PDU input power cables, and then tighten all the screws on the corresponding circuit breakers.
4	Check whether the copper fittings are properly installed.
5	Verify that the positive and negative input power cables of the PDU are correctly connected.
6	Use a Phillips screwdriver to check whether all screws on the circuit breaker are tightened.
7	Re-install the front cover of the PDU, and use a screwdriver to tighten the screws on the front cover.

Precautions	
1	The PDU input power cables should be properly connected to the positive and negative terminals of the PDU respectively.
2	To replace a circuit breaker, disconnect the power supply, loosen the screws, remove the power cable, and then remove the circuit breaker. If it is difficult to remove a circuit breaker, push it inwards and try again.

Installation Tools					
1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials					
1	Power cable	2	Three-in-one copper fitting	3	
4		5		6	

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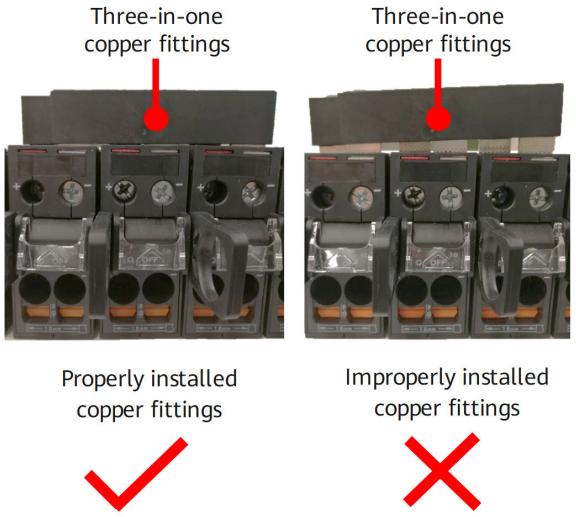
Installing External Input Power Cables for the PDU (Using Three-in-One Copper Fittings) (Continued)

4



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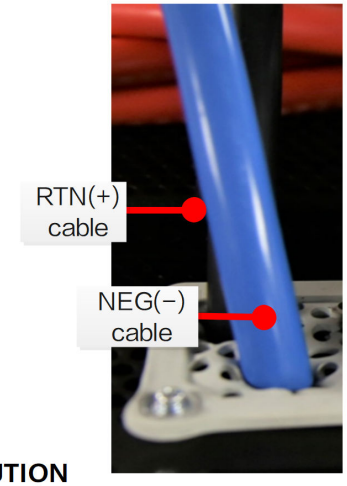
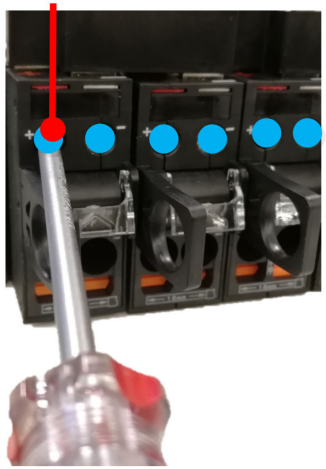


CAUTION

When you look at the PDU from the front, connect the negative power cable (blue) to the front and the positive power cable (black) to the rear.

6

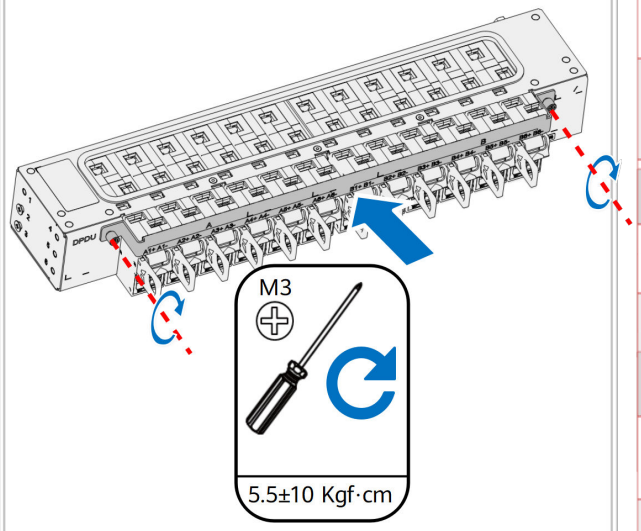
Fastening screw of the circuit breaker



NOTE

When you tighten the fastening screws on the circuit breakers, the external power cables and copper fittings that are connected to the PDB are also tightened.

7



Installation No.	Installation Personnel	Installation Time

Installation Procedure

1	Loosen the two screws on the front cover of the PDU and remove the front cover.
2	Loosen all the screws that secure the circuit breakers. Use a screwdriver to loosen the screws on all circuit breakers to the maximum extent.
3	Install copper fittings, install the PDU input power cables, and then tighten all the screws on the corresponding circuit breakers.
4	Check whether the copper fittings are properly installed.
5	Verify that the positive and negative input power cables of the PDU are correctly connected.
6	Use a Phillips screwdriver to check whether all screws on the circuit breaker are tightened.
7	Re-install the front cover of the PDU, and use a screwdriver to tighten the screws on the front cover.

Precautions

1	The PDU input power cables should be properly connected to the positive and negative terminals of the PDU respectively.
2	To replace a circuit breaker, disconnect the power supply, loosen the screws, remove the power cable, and then remove the circuit breaker. If it is difficult to remove a circuit breaker, push it inwards and try again.

Installation Tools

1	ESD gloves	2	Phillips screwdriver	3	
4		5		6	

Installation Materials

1	Three-in-one copper fitting	2	Power cable	3	
4		5		6	

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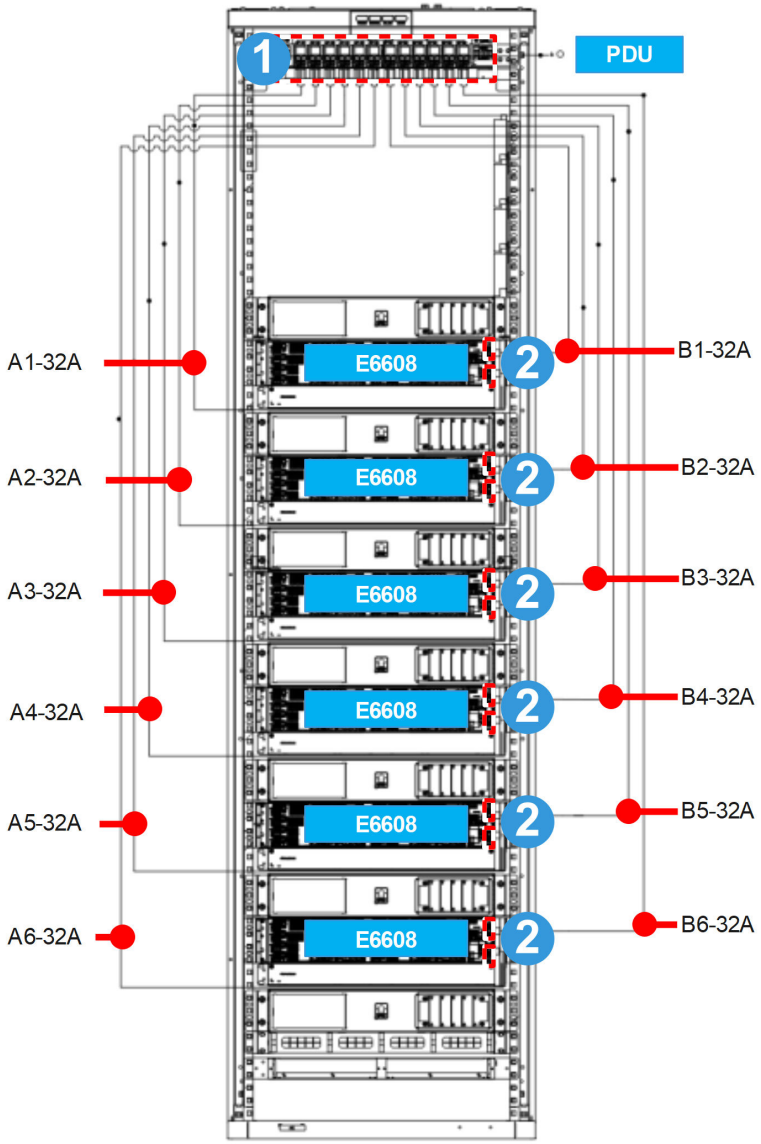
Installing the DC Power Cable of the Chassis (6 x E6608)



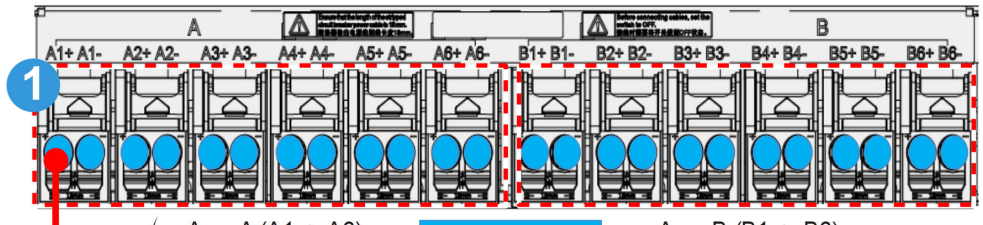
Front view

CAUTION

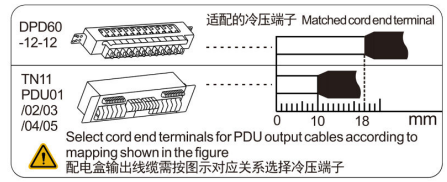
The figure on the left is for reference only and does not represent the actual cabling mode.
The power cables from the PDU to the PIU board of the OSN E6608 are routed along the right rear of the cabinet.

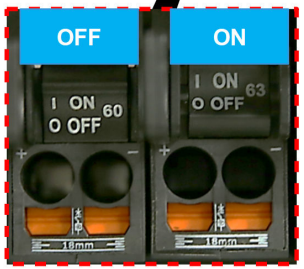
CAUTION

The output cable of the PDU circuit breaker must match the cord end terminal with a depth of 18 mm. When installing the cord end terminal, pay attention to the positive and negative poles (left: positive; right: negative). Do not connect the cord end terminal reversely.



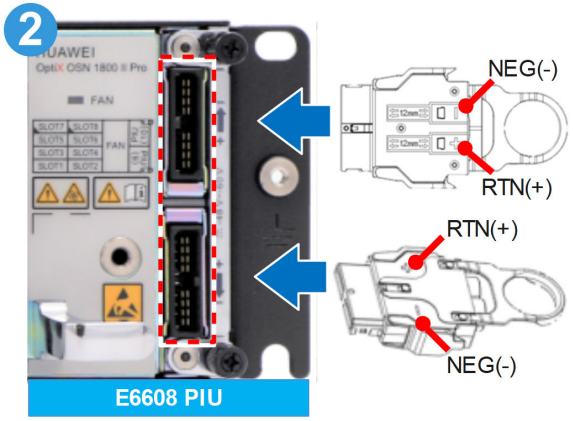
Inserting the cord end terminal of the DC power cable into the port





NOTE

The circuit breakers on the PDU can prevent live wire connection when they are switched to ON, as shown in the above figure.



NOTE

In the E6608 subrack, the upper and lower PIU boards are installed in the mirroring direction. Install them according to the schematic diagram. The power connector has a fool-proofing design and cannot be inserted reversely.

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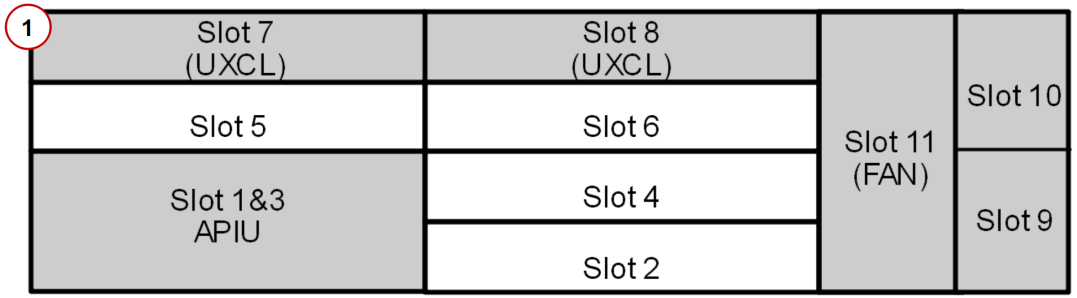
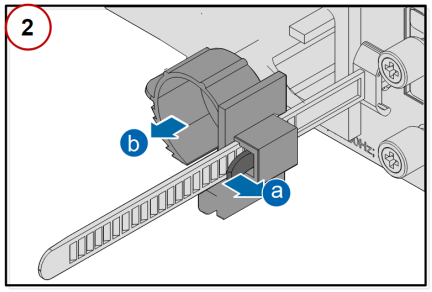
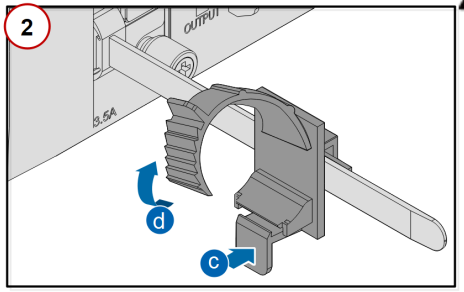
Installing the AC Power Cable of the Chassis



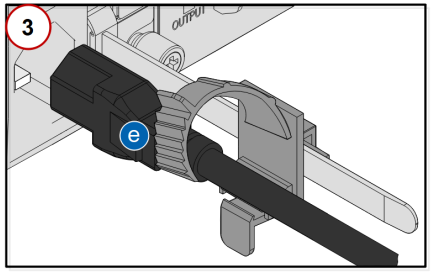
E6608 (AC chassis)

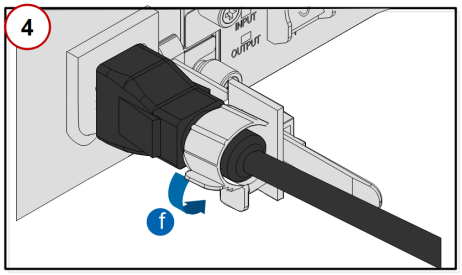




CAUTION

Before installing AC power cables, turn the power switch on the APIU to the off position. After installing and checking the AC power cables, turn the switch to the on position to provide power supply to the equipment.





NOTE

When configuring the APIU on the equipment, install AC power cables. Route the AC power cables along a route based on the condition of the equipment room.

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Check whether an AC power module is installed in the corresponding slot of the subrack.
2	Loosen the locking hoop of the AC power module.
3	Insert the AC power cable into the power port on the AC power module through the loose clamp.
4	Adjust the clamp and power cable properly, and then fasten the clamp.

Precautions	
1	The clamp is used to prevent an AC power cable from being loose. Do not bend the clamp.
2	Do not use the clamp as a handle to carry the device.

Installation Tools					
1	ESD gloves	2		3	
4		5		6	

Installation Materials						
1	AC power cable	2		3		HUAWEI
4		5		6		

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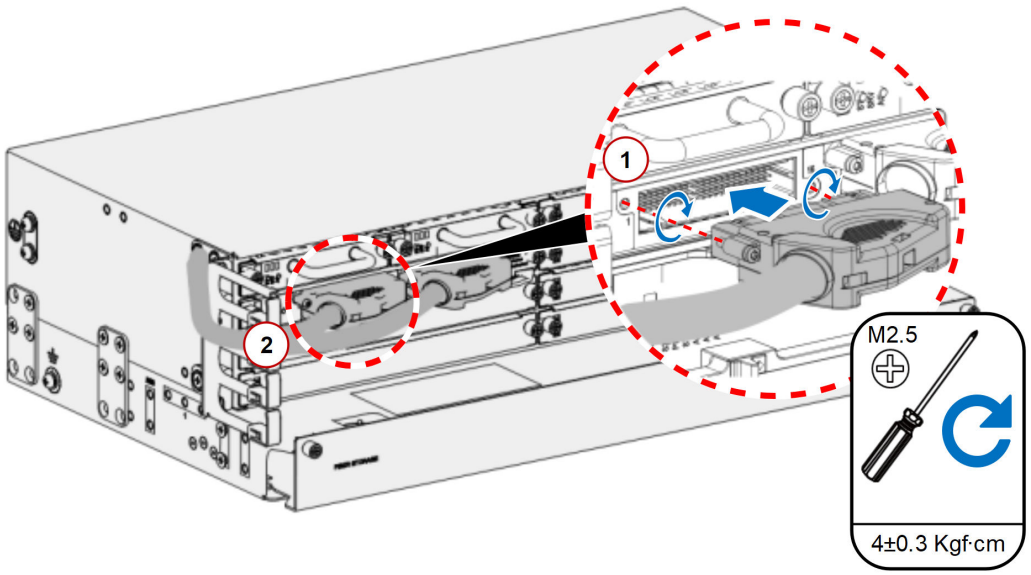
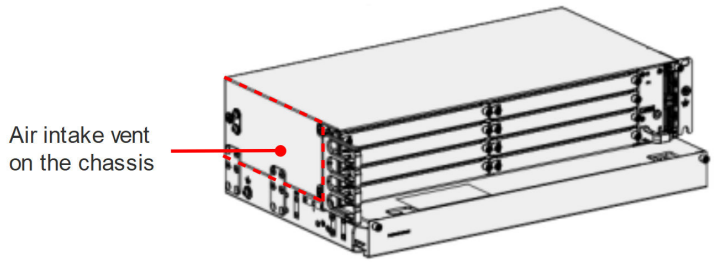
Installing E1/T1 Service Cables



CAUTION

Ensure that the air intake vent on the chassis is not blocked by the cables on the left side of the chassis, and that the air exhaust vent on the chassis is not blocked by sundries such as fibers and paper.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Insert the connector of the E1 cable into the corresponding port on the board, and then tighten the screws.
2	Arrange the E1 cables and route them through the corresponding cable support.

Precautions	
1	When 21-E1 cables are used, it is recommended that no more than three cables be connected to each layer of the chassis to facilitate maintenance and cabling. If the number of electrical ports exceeds the preceding limit, the cable support may not be able to accommodate all the cables and the cabinet door cannot be closed.
2	It is recommended that the E1 cables be installed only on the left boards. This facilitates maintenance on the left boards after the cables are routed.
3	Ideally, a maximum of three PDH boards can be configured in an E6608 chassis.

Installation Tools					
1	ESD gloves	2		3	
4		5		6	

Installation Materials					
1	E1 cable	2		3	
4		5		6	

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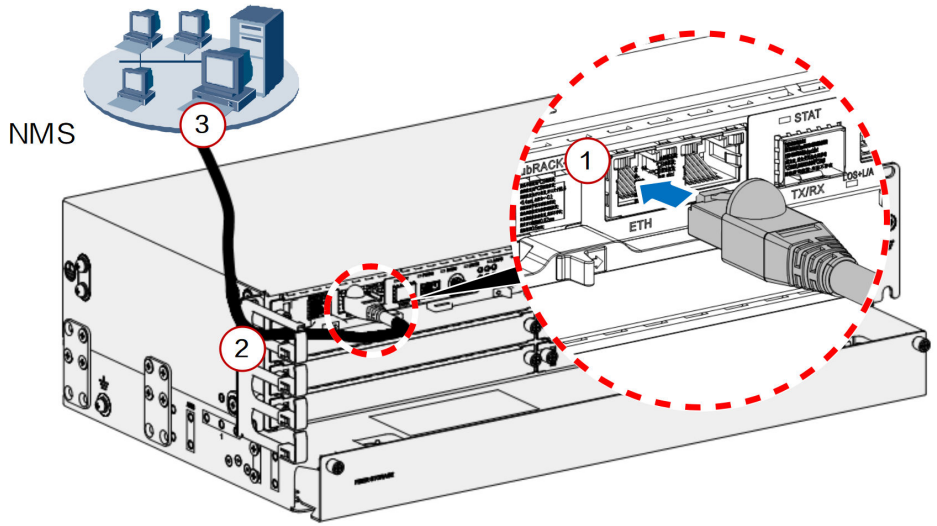
Installing Ethernet Cables

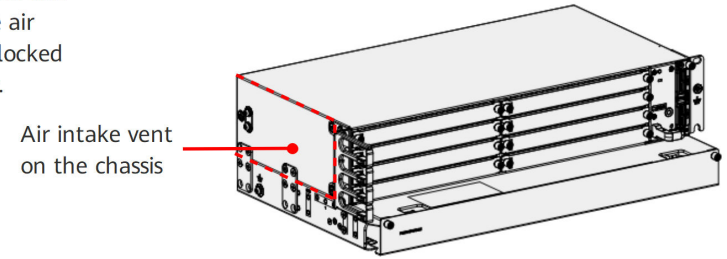
NOTE

The ETH port on the UXCL board is an auto-sensing network port. Both crossover cables and straight-through cables can be used.



CAUTION

Ensure that the air intake vent on the chassis is not blocked by the cables on the left side of the chassis, and that the air exhaust vent on the chassis is not blocked by sundries such as fibers and paper.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Connect one end of the Ethernet cable to the ETH port on the UXCL board.
2	Sort out the Ethernet service cables and use cable ties to bind them at proper positions.
3	Connect the other end of the Ethernet cable to the network management computer.

Precautions

Installation Tools					
1	ESD gloves	2		3	
4		5		6	

Installation Materials						
1	Network cable	2	Cable tie	3		HUAWEI
4		5		6		

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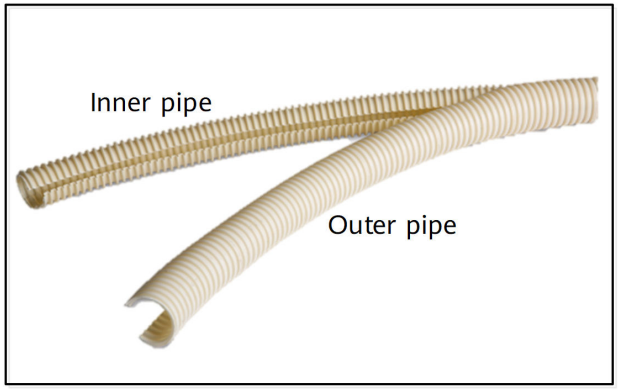
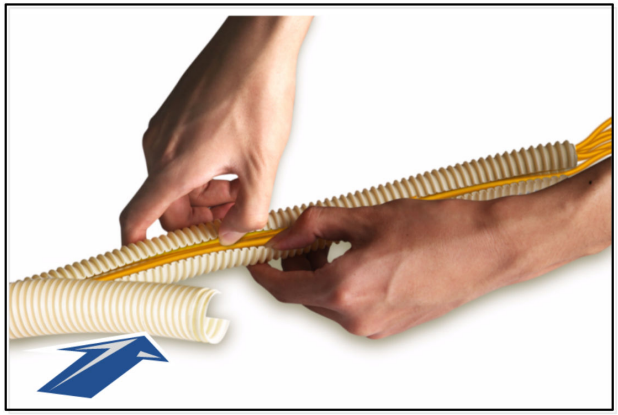
Installing and Routing External Fibers

NOTE

- Do not use an open-end corrugated pipe to hold excessive fibers. It is recommended that an open-end corrugated pipe with a diameter of 32 mm accommodate 60 fibers at most, each with a diameter of 2 mm.
- Before routing fibers out of a cabinet, ensure that they are protected in an open-end corrugated pipe and about 10 cm of the open-end corrugated pipe is inside the cabinet.
- Route the corrugated pipes outside the cabinet according to the actual conditions of the equipment room.
- When routing and installing optical fibers on site, you need to clean the end faces of the optical fibers.



1. Make temporary labels on the external fiber pigtails and properly arrange the pigtails.
2. Place the optical fiber into the inner tube of the open corrugated pipe, close the inner and outer tubes, and take anti-cutting measures on the edge of the corrugated pipe.
3. Route the connector of the optical fiber to the optical port of the board. Route the corrugated pipe to the ODF and bind the optical fiber to the corresponding port on the ODF. (Bind the optical fibers inside the cabinet with fiber binding straps, and corrugated pipes outside the cabinet with cable ties.) Coil extra optical fibers on the fiber management tray of the ODF.
4. Use the compressed air cleaner to clean the fiber adapter and connect the optical fiber connector.



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Installing and Routing Optical Fibers Inside the Chassis

Warning

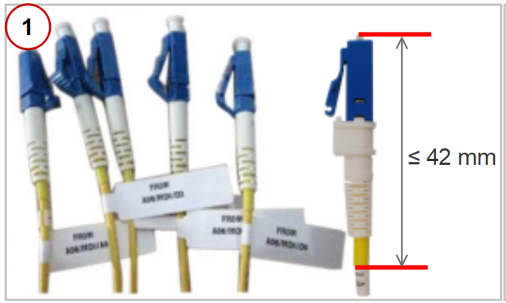
When handling optical fibers, do not stand close to or look into the optical fiber outlet without eye protection.

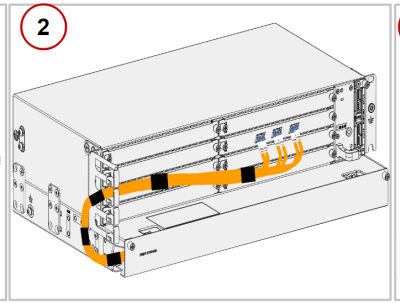
NOTE

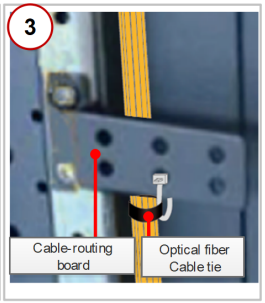
- (Optional) Before installing and routing internal optical fibers, install fixed optical attenuators at the corresponding optical ports on the board according to the fixed optical attenuator installation table.
- If optical fibers are routed in an intersected manner, the fiber management tray cannot be removed. Therefore, avoid internal cascading optical fibers in an intersected manner.
- When routing and installing optical fibers on site, you need to clean the end faces of the optical fibers.

NOTE

- The E6600 uses G657 optical fibers. If you must use optical fibers of other models, contact Huawei engineers for confirmation. After laying out optical fibers, bind them neatly using binding straps to avoid damaging optical fibers. After the optical fibers are connected, the optical connectors and optical ports that are not used must be covered by dustproof plugs and dustproof caps respectively.
- Generally, all internal fibers except the fibers between chassis are installed before delivery. The internal cascading optical fibers are fixed on the top of the chassis with adhesive tapes. Before routing optical fibers, remove the adhesive tapes, arrange the optical fibers, and then hang or fix the optical fibers on the right side of the cabinet. For the internal optical fibers that are not installed, select the correct optical ports on the board according to the labels on the internal optical fibers.

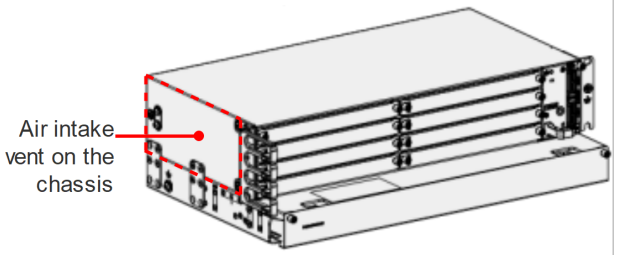






CAUTION

The cables on the left side of the chassis must not block the air intake vent on the chassis. and that the air exhaust vent on the chassis is not blocked by sundries such as fibers and paper.



Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Arrange the optical fibers in order. The optical fibers with the FROM labels that indicate the optical ports of the same OADM board can be arranged on the same side.
2	Bind the optical fibers layer by layer, thread them through the cable support, and insert the other end of each optical fiber into the corresponding optical port.
3	Arrange and bind the optical fibers, and fix the excessive length of the optical fibers to the cable-routing board on the inner side of the cabinet. This can prevent the binding straps from falling down and blocking the air intake vent of the chassis.

Precautions	
1	After the optical fibers are installed, insert plugs into the optical ports that are not used, and put dustproof caps onto the pigtails that are not used.
2	If a fiber management tray is configured, coil the redundant fiber jumpers in the fiber management tray.
3	Do not use cable ties to bind optical fibers. Otherwise, the optical fibers may be damaged.
4	When an optical fiber with an ultra-short jacket, such as the G.657A2 optical fiber, is used, the bending radius of the optical fiber must be greater than or equal to 10 mm.

Installation Tools					
1	ESD gloves	2		3	
4		5		6	

Installation Materials					
1	Optical fiber	2	Binding strap	3	
4		5		6	

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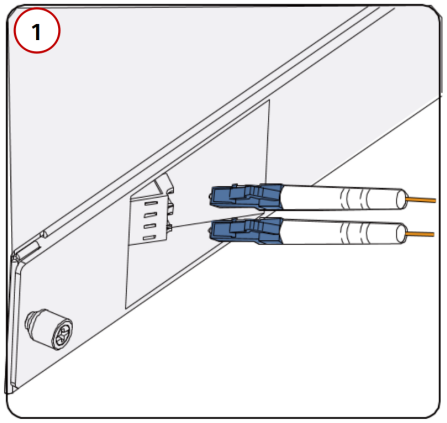
Installing and Routing Optical Fibers on the DCM

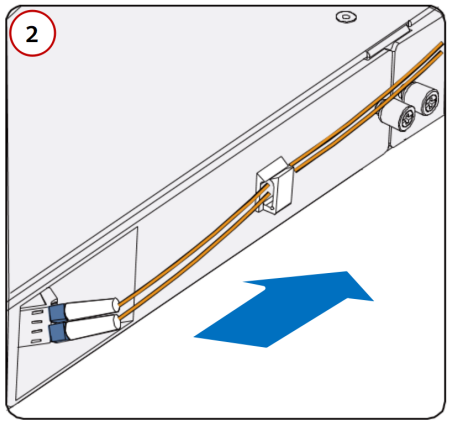
WARNING

When handling optical fibers, do not stand close to or look into the optical fiber outlet directly with naked eyes.

CAUTION

- When connecting fibers on the DCM, make sure that the fibers on the two DCM modules are correctly connected according to the engineering design documents provided on site.
- When routing and installing fibers onsite, you need to clean fiber end faces.
- After the fiber installation, insert fiber plugs in idle interfaces and cover idle fibers with fiber caps.





Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Remove the dustproof cap and slowly insert the optical fiber into the optical port.
2	Arrange the optical fibers and use binding straps to fix them.

Precautions	
1	After the optical fibers are installed, insert plugs into the optical ports that are not used, and put dustproof caps onto the pigtails that are not used.
2	If a fiber management tray is configured, coil the redundant fiber jumpers in the fiber management tray.

Installation Tools					
1	ESD gloves	2		3	
4		5		6	

Installation Materials						
1	Fiber	2	Binding strap	3	Cable tie	HUAWEI
4		5		6		

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Overall Installation Effect

When the installation is complete, double check that these items have been properly performed.

No.	What to Check For	Method
1	The cabinets are positioned in the places defined by the site-specific engineering design.	Visual inspection
2	The subrack(s) and other components are properly installed and are free of damage or loose parts. No fingerprints, scratch marks, or other stains are present on the cabinets.	Visual inspection
3	Cable holes at the top and bottom of the cabinets are securely sealed.	Visual inspection
4	Cables are routed according to the engineering design.	Visual inspection
5	Cables are not damaged, broken, or spliced. The cable connectors are connected correctly and securely.	Visual inspection
6	Labels at both ends of each cable and fiber are marked correctly, clearly, and neatly.	Visual inspection
7	The fibers routed outside a cabinet are protected in a pipe or trough, and are protected from being pulled out or pressed against by other cables or objects.	Visual inspection
8	The bending radius of optical fibers must be greater than or equal to 30 mm. When ultra-short-jacket optical fibers such as G.657A2 optical fibers are used, the bending radius must be greater than or equal to 10 mm. Ensure that no protruding component exists on the cabling route of the optical fiber.	Visual inspection
9	Fibers are placed in order and are properly bound with fiber binding tape. There are no sharp edges.	Visual inspection
10	Any vacant slots are covered with filler panels, and no devices are located in the air intake and exhaust areas.	Visual inspection
11	Re-install the PDU cover after connecting cables.	Visual inspection
12	After the cabinet door is closed and locked, the rotation lock will not be inserted into the cable on the cable management frame of the chassis.	Visual inspection

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Equipment Inspection Before Power-On

1

Circuit Breaker	Between NEG(-) and RTN(+) terminals	Between NEG(-) and PGND terminals	Between RTN(+) and PGND terminals
When switches are set to OFF	∞	∞	0
When switches are set to ON	>1k Ohms	>1k Ohms	0

NOTE

The following figure shows the positions for measuring NEG(-) and RTN(+) of the power box using a multimeter.

2

Maximum Power Consumption of E6608 (AC)	Maximum Power Consumption of OSN E6608 (DC)
1200 W	1200 W

Installation No.	Installation Personnel	Installation Time

Installation Procedure	
1	Switch off the power sources for the equipment. Use a multimeter to measure the resistance between NEG(-), RTN(+), and PGND terminals on the equipment.
2	Check the fuse capacity of the power supply device against the actual power consumption of the device.

Precautions	
1	After measuring the power voltages, shut down all power inputs to the PIU boards.
2	Do not power on the equipment when the power voltages are not within the specified ranges.

Installation Tools					
1	ESD gloves	2	Multimeter	3	
4		5		6	

Installation Materials					
1		2		3	
4		5		6	

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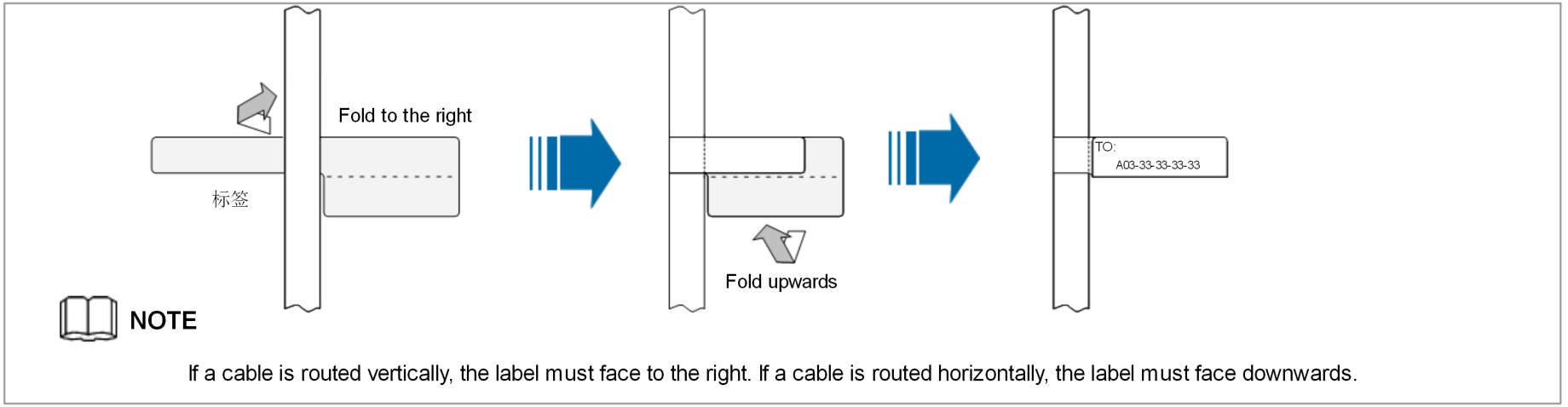
Affixing Labels

NOTE

Affix a label to a cable/fiber 2 cm away from its connectors.

a Affixing a Label to a Power Cable

b Affixing a Label to a Signal Cable



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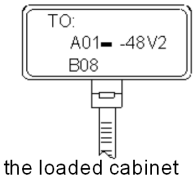
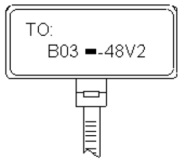
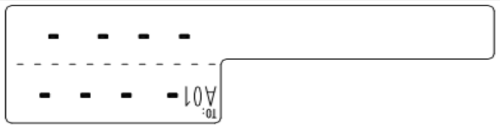
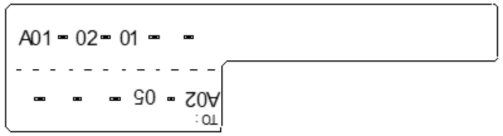
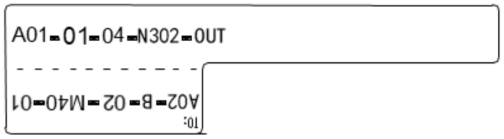
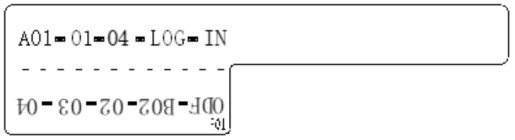
Standard Engineering Labels

Name	Content	Example	NOTE
Labels for power cables	MN(BC) - -48V1 MN(BC) - -48V2 MN(BC) - BGND MN(BC) - PGND	 Alabel on the loaded cabinet side, which indicates the destination of the power cable  Alabel on the power distribution cabinet side, which indicates the destination of the power cable	On the loaded cabinet side, MN identifies the row and column number of the power distribution facilities (such as the power control cabinet and power distribution box). BC identifies the row and column number of the -48 V connector. BC is written directly underneath MN. BGND and PGND are not assigned rows or columns for identification. On the power distribution facility side, only MN is required to indicate the cabinet number.
Label for housekeeping alarm cables	MIN		MN indicates the row and column number of the cabinet. From front to back, rows are lettered from A to Z. From left to right, columns are numbered from 01 to 99.
Label for Network cables	MIN-A-B		MN indicates the row and column number of the cabinet. A is a two-digit number that indicates the position of a subrack in a cabinet. Subracks are numbered from bottom to top. B is a two-digit number that indicates the Ethernet interface of the equipment in a cabinet. Ethernet interfaces are numbered from top to bottom and from left to right.
Label for fibers used to connect WDM devices	MIN-A-B-C-D		MN indicates the row and column number of the cabinet. A is a two-digit number that indicates the position of a subrack in a cabinet. Subracks are numbered from bottom to top. B is the slot ID. C identifies a board name. D is the optical interface name.
Label for fibers used to connect WDM devices to the ODF	MIN-A-B-C-D		MN indicates the row and column number of the cabinet. A is a two-digit number that indicates the position of a subrack in a cabinet. Subracks are numbered from bottom to top. B is the slot ID. C identifies a board name. D is the optical interface name.
	ODF-MIN-A-B-C		MN identifies the row and column number of the ODF. A identifies the number of the subrack inside the ODF. B identifies the row number of a terminal. C identifies the column number of a terminal.

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